The Baillie Lectures

ON

THE CARDIO-VASCULAR CHANGES OF RENAL DISEASE, WITH SOME OBSERVATIONS ON THE LARGER ARTERIES.

Delivered at St. George's Hospital on June 19th and 26th and July 3rd, 1895,

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LECTURE I.

Delivered on June 19th, 1895.

GENTLEMEN,—Excepting what has to do with bacteria it may be said that no observations in pathology have been so fruitful in results as the great discovery of Bright. I do not now propose to deal with this as regards the kidneys themselves, but only to touch upon some of the systemic consequences of renal disease which Bright partly, I may say in large part, made known. Bright noticed the hypertrophy of the left ventricle, and attributed the muscular increase to abnormal resistance. He inferred that there was an obstacle in the outward course of the blood, and assigned the capillaries as its probable situation. The immediate cause he considered to be in the impurity of the blood, which in some way interfered with its transit through these channels, which expose to the blood so large a surface and maintain with it such intimate relations. This theory held its ground without modification or question until Dr. (now Sir George) Johnson observed the thickening of the muscular coat of the arterioles, and was led to the belief that the hindrance was not in the capillaries, as Bright had supposed, but in the minute arteries thus thickened. Johnson argued that the capillaries were not muscular, and therefore not contractile, while the arterioles were both. In this view the arterioles became hypertrophied in their efforts to keep the impure blood out of the tissues; the heart became hypertrophied in its endeavours to overcome the resistance thus occasioned. The muscularity of the arterioles is not to be disputed, and it is known to physiologists that under certain influences, connected particularly with the nervous system, these vessels have the power of contracting, and so cutting off the blood from the tissues; but whether this stopcock action, as Johnson called it, is the essential factor in the cardio-vascular change of heart disease remains to be seen. The capillaries have been shown to be contractile, though not muscular, and the observations of Johnson do not disprove the theory of Bright.

Leaving this contest as yet undecided, I must note the appearance of another combatant, or rather hostile alliance, upon the field. Sir W. Gull and Dr. Sutton, neither of whom, I grieve to say, are with us now, came down in force upon the position of Johnson, and a great battle ensued, which was waged with obstinacy and even with asperity. The allies disputed the muscular thickening of the arterioles, and maintained that the only thickening was of the fibrous tissue. Johnson, in upholding the muscular increase, denied the fibrous, the appearance of which he held to be delusive and the result of reagents. The contest was the more obstinate because there was right on both sides, and the more embittered because on both sides there was wrong. Without staying to recall the fortunes of the fight, I may say that I took then, and have taken since, some pains to satisfy myself of the actual condition of the arterioles, and will briefly repeat, what I said at an early stage of this controversy, that the muscular thickening as described by Johnson is a fact which does not admit of doubt. On the other hand, it is equally certain that with this there is fibroid overgrowth, however brought about. The champions of fibrosis did not attribute the vascular change to the renal or acknowledge any steps in the pathological process, but they regarded both as the parallel and simultaneous results of a baneful tendency which pervaded the whole body like original sin, affected at the same time the vessels and the viscera, and produced a general deterioration, which they likened to the effects of age. This comprehensive theory is probably not entirely without foundation; there *is* such a thing as general fibrosis, particularly as a form of senile decay, and of this general fibrosis the granular kidney may sometimes be a part. But it is abundantly clear that this explanation suffices but for a small minority of the cases in which cardio-vascular changes are associated with renal. By far the greater number begin with disease local to the kidney, and proceed from step to step through the blood to the vessels and the heart. Inflammation limited to the kidney, produced by cold or scarlet fever, perhaps in a child where there can be no question of general fibrosis, except as a result of renal disease, is constantly and rapidly followed by the special cardio-vascular hypertrophy, and that in its most extreme and characteristic shape. That the granular kidney is essentially a local matter and not a mere subdivision of a general fibrosis, as Gull and Sutton tried to make us believe, is borne out by what happens to the liver. Of all the organs in the body the kidney and the liver are the most liable to fibrotic change. If the kidney is affected thus merely as part of a general change the liver surely ought to participate. But it does not do so. I found that in 250 cases of granular degeneration of the kidney, the liver displayed the corresponding change—that is, cirrhosis—in only 37 instances, a proportion of 1 in 7.[1] Granulation of the kidney and cirrhosis of the liver do not go together, as they should do if the fibrotic change in each were due to a common cause. The fact is that, putting aside the general effects of valvular disease of the heart, the liver and kidney are each influenced by causes proper to themselves, not common to the whole body. The liver is made fibrotic chiefly by alcohol, the kidney chiefly by climate, lead, gout, heredity, and as the sequel of acute nephritis. It has always seemed to me that the morbid independence of these organs is a strong if not a conclusive argument against the theory of general fibrosis as propounded by Gull and Sutton. On every ground, therefore, we must accept that as a *general rule*—I do not say there are no exceptions, but I am sure they are few—the renal change is the initial mischief, the *fons et origo* of which the cardio-vascular changes are the results.

The only question that presents itself as admitting of doubt is by what process the renal change brings about the cardio-vascular. The impurity of the blood due to the imperfect action of the kidneys may be accepted as an intermediary, but how does it produce the effects in question? There is presumably an obstruction which gives rise to increased blood pressure, and this to hypertrophy of both muscle and fibre. But where is the obstruction? Is it in the capillaries, as Bright supposed, or are we to place it with Johnson in the arterioles? It seems unlikely at first sight that the heart and the arteries should become hypertrophied by acting against each other—it looks like a want of the common consent which we usually find in nature; but how shall I say it is not so? There are many things which are too wonderful for us, four of which have been mentioned by a royal and inspired author. The action of the heart and vessels may be, like these, beyond our comprehension; but it is not beyond our inquiry. I have ever found, when a difficulty presented itself, that the best way was not to argue or even to reflect, but to seek for additional facts. Being able to get them is the great advantage we have over our brethren the theologians. The facts at their command cannot be added to by observation, whatever talent may be expended in reconsidering the stock in hand. With us the main endeavour is to collect fresh particulars, and nothing further is necessary than to let them speak for themselves. Unlike the students of theology, we are able to push our inquiries beyond death, and take for our motto, "Nec silet mors."

As possibly throwing light upon the rival theories of obstruction in the capillaries and in the arterioles, I thought it worth while to look more widely than had hitherto been done at the distribution of the arterial hypertrophy. If this should prove to be limited to the smaller vessels, which alone can be credited with the stopcock action, then the stopcock or inhibitive action may be the cause of the hypertrophy, or of as much of it as concerns the muscular coat; if, on the other hand, the large arteries should be found to partake of the same alteration, then we must look for some cause which acts alike on large and small. With this view I have examined a series of arteries, including some of the largest: the aorta, the innominate, the common femoral, and the renal. Sections of these vessels made carefully in the same respective

[1] Albuminuria, second edition, p. 171.

situations were placed under the microscope and outlined on paper with the camera lucida and a uniform magnifying power of 6·35 diameters. The tracings thus obtained were then measured both as to the thickness of the wall and the circumference of the vessel. The number of vessels thus treated amounted to 139, which were supplied by forty-nine individuals mostly chosen as the subjects of marked renal disease or as presenting the type of health. The conclusions are based upon the whole number of vessels of each kind and not derived from selected specimens. As a standard of health I have taken eighteen post mortems, generally after accident or acute disease—ten of males and eight of females. In the male series I have added two cases of acute nephritis, in which, as there was no time for, nor any evidence of, cardio-vascular change, the vessels may be taken as healthy and as furnishing a second standard of comparison. The granular kidney is represented by sixteen male subjects and seven female. In the latter series I have thrown together, as exhibiting virtually the same condition, and that the fibrotic, kidneys described as *granular* and as *white contracting*. The male series shows that with the granular kidney the aorta is thicker than in health as 42 to 39, and thicker than with acute nephritis as 42 to 31. The innominate with the granular kidney gives a thickness of 0·41 in., that with health 0·35 in., and that of acute nephritis 0·30 in. The common femoral gives with the granular kidney a thickness of 0·33 in., with health that of 0·26 in., and with acute nephritis that of 0·24 in. The renal gives with the granular kidney a thickness of 0·25 in. in health, and with acute nephritis one of 0·18 in. Both coats are thickened, as will be seen on reference to the accompanying table. The muscular shows the change with more exactness than the fibroid, for it is not exposed in removal, or liable, as the outer coat is, to have any part left behind. The circumference of the vessels of each kind is also increased with the granular condition, that of the aorta giving 13¾ in., as compared with 11¼ in. in health and 10¾ in with acute nephritis. The innominate, femoral, and renal showed similar increase under the same circumstances, as is displayed in the table. The comparison, as far as relates to the female sex, will be seen to give similiar evidence. The aorta, the innominate, and the femoral are all increased under the renal charge in question in the total thickness of the wall, in the thickness of the muscular coat, and in circumference. The only exception is in the case of the renal artery in the female, which presents an increase of circumference, but none in the thickness of the wall; only eight specimens, however, of this vessel in this sex were examined, and the number is too small to give weight to the exception.

I have added as collateral illustrations two instances which show the absence of arterial thickening, as of cardiac hypertrophy, with the large white and the lardaceous kidney; and a third which presents a large amount of aortic thickening in connexion with atheroma without renal disease. This aorta, which displayed a large endoarterial deposit, gave a total thickness of 0·57 in., which was greater than those in any of the renal cases, the thickest aorta with renal disease measuring 0·55 in. With the aorta thus thickened by atheroma the change did not extend to the innominate, which was thinner than the average of health.[2] The above measurements will, of course, be understood to apply not to the actual dimensions of the vessels but to those of the representations uniformly magnified as stated.

It has been well known since the observation of Sir G. Johnson—which represents a great truth, however it is to be interpreted—that with the chronic granular kidney the arterioles, even to the smallest, become hypertrophied. For the purpose of this inquiry I thought it would be of interest to ascertain as far as practicable how the degree and kind of thickening here compared with that of the larger vessels. To this end I have examined afresh a number of minute arteries belonging to the pia mater and median fissure of the brain, which are in my possession as the results of former work. Some have been preserved in Canada balsam, others in glycerine. I have dealt with these specimens graphically, making outlines of them with the camera lucida, as in the case of the larger vessels. I may say that I have made no selection—by judicious selection it is possible to prove anything—but I have taken all that came to hand as either typically healthy or connected with typical granular kidneys. The results are before you. The outlines show that under renal disease there is generally, but not universally, thickening of the wall, and that this affects both the muscular and the fibrous coats. The total thickening, and that of each coat, is, judging by the eye, generally greater in the small vessels than in the larger, though demonstrably present in both.

Putting all the facts together, and including what is common knowledge as to the left ventricle, we may formulate the general statement that in connexion with the chronic granular kidney we have hypertrophy of the muscle and of the fibrous tissue belonging to the whole arterial system connected with the left side of the heart, and of the muscle of the heart itself. It is probable that had the inquiry been carried into the pulmonary vessels similar changes might have been found there. We see indications of them in the hypertrophy of the right ventricle, which in these circumstances is almost invariably associated with that of the left, though on a smaller scale. Looking at the import of the changes which have been recorded, we recognise, first, the general application of the ancient dictum that muscle becomes hypertrophied when resistance is opposed to its contraction. We next see the influence of another law, which may act together with, or independently of, the first—namely, that tissues, whether epithelial, fibrous, or muscular, become over-nourished and overgrown as the result of habitual congestion or over-pressure, or undue retention, of blood within them. As

[2] I may introduce a word as to the methods employed. Sections of the arteries were cut with the microtome and mounted on slides for the microscope. These were reflected on paper with the camera lucida and carefully outlined, all with exactly the same microscopic and optical arrangements. With the magnifying power used the vessels were presented as large enough to be accurately measured. The thickness of the wall was ascertained with a rule graduated to hundredths of an inch. The circumference, taken along the outer edge of the muscular coat, was measured with a rotating instrument such as is used for estimating distances on maps. This gave the circumference in inches and fractions of an inch. The enlarged figures to which I have referred were displayed in the course of the lectures. I believe the measurements may be accepted as accurate.

THICKNESS AND CIRCUMFERENCE OF ARTERIES (MAGNIFIED 6·35 DIAMETER). (Mean Measurements in Inches.)

Male Adults.

State of kidney.	Number of cases observed.	Aorta.			Innominate.			Femoral.			Renal.		
		Total thickness.	Muscular thickness.	Circumference.	Total thickness.	Muscular thickness.	Circumference.	Total thickness.	Muscular thickness.	Circumference.	Total thickness.	Muscular thickness.	Circumference.
Healthy	10	0·39	0·29	11½	0·35	0·27	8½	0·26	0·13	4½	0·18	0·10	3
Acute nephritis; no cardio-muscular changes	2	0·31	0·26	10¾	0·30	0·22	7¼	0·24	0·14	4⅓	0·18	0·08	4
Large white kidney	1	0·35	0·25	12	0·40	0·30	8	0·30	0·20	5	—	—	—
Granular	16	0·42	0·31	13¾	0·41	0·29	8¼	0·33	0·21	6½	0·25	0·14	3½
Lardaceous kidney	1	0·30	0·27	12	—	—	—	0·35	0·25	5½	—	—	—
Highly atheromatous aorta ...	1	0·57	0·38	15½	0·30	0·23	6½	—	—	—	—	—	—
Female Adults.													
Healthy	8	0·34	0·26	11	0·26	0·24	7	0·24	0·15	4½	0·21	0·13	3
Granular or white contracting kidney	7	0·38	0·30	12½	0·36	0·27	9	0·29	0·16	5	0·19	0·11	3½

regards renal disease, it is impossible to separate the question of obstruction ahead from that of over-pressure by their contents upon the arterial walls. Some of the forms of renal disease are attended from their outset with increased blood pressure, others are not. When the pressure is increased, then, sooner or later, there is hypertrophy; when it is not increased there is none. This state of pressure or tension precedes the hypertrophy, for it is evident to the finger, the sphygmograph, and the stethoscope long before there has been time for any structural change. The granulating kidney and the lardaceous may be instructively contrasted. The granulating kidney—beginning, say, in nephritis—is attended from the very first with increased tension and followed as surely by hypertrophy. The lardaceous condition begins with no increase of tension or even with a lack of it; the heart remains small to the last, or, at least, until other renal changes are superadded. It is clear that there is a necessary connexion between the over-tension and the hypertrophy; and as the cause precedes the effect, it must be supposed either that the tension causes the hypertrophy or else that both are the results of some common cause. Searching for the immediate cause of the increase of tension and the hypertrophy which follows upon it, we can only attribute one and both to a difficulty in the emptying of the arterial system caused by an obstruction at or near its outlet, due to the morbid condition of the blood. So far all seems clear. The increased retention of blood within the arterial system is an adequate cause for vascular and cardiac thickening, on the principle which has been already adverted to, by which congestion causes hypertrophy. This would seem to be the essential and simple cause of the fibroid thickening. With regard to the muscular there are other considerations. The arteries are alternately filled by the ventricle and emptied by their own contractility. Peripheral resistance will oppose their contraction and thus occasion muscular hypertrophy. With the large arteries this rule seems of obvious application; they are in the same case as the heart and owe their hypertrophy to similar means. With regard to the minute and terminal arteries, other modes of action are to be taken into view. These vessels, which are known under certain circumstances to exert a special contractile power and thus cut off the blood from the capillaries, have been supposed to do this in renal disease and to owe their hypertrophy to their efforts not to accelerate, but to retard the current. I will not argue for this view or against it, but content myself with stating the facts, or what appear to me to be such, which bear upon it. I think it must be allowed that the smaller vessels are generally more thickened than the larger—at least, I have seen some examples of extravagant thickening among the smaller which I have failed to find in the larger vessels.

It often appears that the calibre of the small vessels is lessened in comparison with the thickness of the walls, whereas with the larger there is dilatation as well as parietal thickening. It looks as if the smaller vessels had some special cause of hypertrophy beyond that which affects the larger. There may be a special inhibitory mandate addressed to their muscular tissue, but against this we have to place the fact that the fibrous tissue, to which no such mandate could be held to apply, is at least equally thickened. Whatever be the cause of the hypertrophy, it must relate equally to both coats.

In searching for the primary seat of obstruction, however our attention may be arrested by the arterioles, we must not disregard the capillaries. These have been proved to be contractile, though they are not muscular.[3] These vessels are in more intimate relation to the blood than any others, and may be supposed to be the first to be influenced by its abnormal conditions; and as evidence that they are so influenced we have the appearance of dropsy—or, in other words, of abnormal capillary transudation—at the outset of renal disease. This process is capillary and not arterial, and at least points to a morbid condition of which the capillaries, not the arterioles, are the seat. Arterial obstruction, indeed, must be prohibitive of dropsy by cutting off the blood from the vessels which are its source. These considerations appear to indicate that, whatever be part of the terminal arteries, the capillary system is the point of departure of the series of changes which have been described. Whether these terminal arteries have any special sympathy with the capillaries with which they are so immediately connected is a question which suggests itself. Whatever be the explanation of the vascular changes upon which I have dwelt, it must include the fibrous thickening as well as the muscular.

Without attempting to pursue these questions to the end I will content myself for the present with having demonstrated the fact that under renal disease, putting aside the pulmonary department to which the same rule probably applies, there occurs a hypertrophy of the cardio-arterial system which is universal from its origin to its termination, and comprises not only the ventricle and the arterioles, but affects also the intermediate arteries of every size.

In conclusion, I have to thank Dr. Rolleston, Dr. Lee Dickinson, and Dr. Cyril Ogle for procuring the specimens of which I have made use. My especial thanks are due to Dr. Rolleston—and to a larger extent to Mr. Fenton—for cutting and mounting the sections.

[3] Paper by Dr. Roy and Dr. Graham Brown on "The Blood-pressure and its Variations in the Arterioles, Capillaries, and Smaller Veins." (Journal of Physiology, 1879–80, Part 2, p. 323.)

A Clinical Lecture

ON

CHRONIC INFLAMMATION OF THE UTERUS.

Delivered at the Middlesex Hospital on June 20th, 1895,

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GENTLEMEN,—The subject which I have chosen for this afternoon's lecture is probably the commonest disease to which a woman is liable, and it is not often that one or more of the beds in Prudhoe Ward are not occupied by a patient suffering from chronic inflammation of the uterus. Under the disease just mentioned I include inflammation affecting not only the parenchyma of the uterus (metritis), but also that involving the membrane lining the cervical canal (endocervicitis) and that lining the uterine cavity (endometritis). All the tissues of the uterus are more or less involved in chronic metritis, so that usually endometritis cannot clinically be dissociated from metritis, although in some cases the endometritis is predominant—in others the metritis. The microscopical appearances, thanks to Wyder, Ruge, and others, are now well known, and in briefly mentioning them I will follow the views of Wyder.

When the uterine wall is the chief seat of inflammation we find the whole uterus enlarged—perhaps even to the size of a man's fist—by hypertrophy of the connective tissue with usually some muscular hypertrophy also. The arteries and veins are much thickened by hypertrophy of the tunica adventitia. The connective tissue remains permanently hypertrophied and does not undergo cicatricial contraction. When the membrane lining the uterine cavity is chiefly affected the changes are such that they can be classified under the following heads: (*a*) chronic hæmorrhagic or villous endometritis, (*b*) chronic catarrhal or glandular endometritis, and (*c*) chronic interstitial endometritis.

In the villous or hæmorrhagic form the mucous membrane is greatly hypertrophied, perhaps to four or five times its usual thickness; it is deeper in colour and, instead of being smooth, has become fungoid, and the projections may form true polypi. In some cases there are found small transparent vesicles, which under the microscope are seen to be dilated glands, the openings of which are closed by connective tissue. The inter-glandular tissue is very vascular. In the glandular or catarrhal form the glands are enormously increased in size and become convoluted at their deep extremities; there is also an increase in their number, so that both hypertrophy and hyperplasia coexist, but otherwise the glandular tissue is normal in structure. In the interstitial form a new connective tissue is developed between the glands, and in some parts it converts the latter into cysts; in others of longer duration the glands may have disappeared altogether, so that the mucous membrane is represented by a layer of connective tissue lined by epithelium.

Causation.—It is becoming more and more a well-recognised fact that in the vast majority of cases of chronic inflammation of the uterus the origin is due to bacterial infection. This infection may be, and too often is, gonorrhœal in character,

and then not infrequently the inflammation tends to extend beyond the uterus to the Fallopian tubes. A husband may infect his wife directly after marriage if he have the slightest trace of gleet the result of a gonorrhœa which he contracted it may be many years previously and of which he considered himself perfectly cured. Bacterial infection, too, is very common after parturition, especially where any bits of placenta or membranes have been left behind, or where the attendant has examined with a dirty finger or used unclean instruments. Apart from bacterial infection, parturition may be the starting-point of chronic metritis owing to the woman getting up too soon, to the uterus being retroflexed, or to deep lacerations of the cervix, all of which tend to produce subinvolution, congestion, and subsequently inflammation. Again, the disease may be caused by catching cold during menstruation, by the use of a cold injection, which is often had recourse to directly after coitus, and when the pelvic organs are full of blood, in order to prevent conception. Excessive coitus, and especially all operations on the uterus which are not conducted with strict antiseptic precautions, may cause chronic metritis. Not a few cases can, I fear, be traced to the careless use of the sound, for it is very easy to carry into the uterus on its point some pus from the vagina.

Symptoms.—With regard to symptoms there are none peculiar to the disease under consideration. The patient usually complains of weakness and a bearing-down pain in the pelvis, which is aggravated by walking or the jolting of a carriage, and which very often shoots into the back and down the thighs; pain over the left ovarian region is three or four times more common than on the right side, and this frequency of left-sided pain is due probably to the left side of the body being weaker and having less resisting power than the right. The "periods" are painful and excessive, lasting perhaps a week instead of three or four days, during which time the patient has to use several diapers daily. This excessive loss is the chief characteristic of villous endometritis, and the periods may be so profuse that a woman sometimes becomes as blanched as is seen in cases of hæmorrhage from fibroids. Clots are often passed, and the pain complained of usually begins just as the period comes on and is relieved in a day or so when the flow is fully established. There is a more or less profuse yellow intermenstrual discharge. Various reflex symptoms not infrequently manifest themselves, such as dyspepsia, a peculiar spasmodic cough, neuralgia of various kinds, and especially often does a woman complain of a severe stabbing pain running round under the left breast. Lastly, hysteria in its various forms may be present, especially in women who are naturally of a neurotic disposition; but it is a grave mistake in these cases to ignore, as some practitioners do, the uterine symptoms and to put them all down to hysteria. A typical instance of this kind I met with only last week, in which a lady aged twenty-five had a miscarriage three years ago. Since then the periods have been excessive and she has suffered from more or less constant severe pelvic pain; during all this time she had taken medicine prescribed by her medical attendant, a very able practitioner, but no local treatment was made. On examining her I found she had an enlarged and very tender uterus, with some erosion round the os uteri and a purulent discharge exuding from it. I communicated with the medical man, and he told me he had diagnosed the enlarged and tender uterus, but as the patient was a neurotic woman he thought general rather than local treatment was indicated. In my opinion the chronic metritis present was the cause of the nerve symptoms and called for prompt local measures.

Physical signs.—These are usually the same as those met with in the case just mentioned: a uterus felt on bimanual examination to be enlarged and tender—it may be retroflexed; the cervix is hypertrophied, and instead of being conical it is either cylindrical or bulbous, more or less purplish in colour, and often lacerated; the pain caused on examination is most severe when the uterus is jerked up as in ballottement of the gravid organ. With the speculum the cervix may be seen to be eroded, it may be studded with yellowish vesicles as a result of cystic degeneration, and a yellow discharge may be seen exuding from the os uteri. If the sound be passed it causes pain, sometimes very severe, it enters to an increased distance, three inches and a half or even four inches, and its withdrawal is followed by some blood.

In diagnosing chronic metritis we sometimes have to exclude cancer; but in metritis the discharge is never so offensive or of the peculiar character met with in cancer. When the chief symptom is hæmorrhage we might suspect fibroids or polypi. Now in a case of fibroids the uterus would feel harder and irregular in outline on bimanual examination, whilst perhaps the sound would enter five or six inches. In polypi the symptoms and physical signs—if the polypi be of the small mucous variety—may be precisely the same as in chronic metritis; and it is impossible to distinguish between the two until the cervical canal has been sufficiently dilated to permit of digital exploration. As a matter of fact, in some cases of chronic metritis the mucous membrane assumes, as I have already mentioned, the polypoid form. The treatment for both the diseases is precisely the same. It must not be forgotten that disease of the uterine appendages is a by no means infrequent accompaniment of chronic metritis, and should be carefully searched for, as the complication may modify the treatment, and it certainly renders the prognosis a less hopeful one. Disease of the uterine appendages is in the majority of cases secondary to uterine inflammation, but it may be the primary condition and induce metritis secondarily. Careful examination of the pelvis will always reveal whether the tubes and ovaries be enlarged or not. The rectum should have been previously emptied, and then by the bimanual or, better still, the abdomino-rectal examination—preferably with the patient anæsthetised—we can assure ourselves of the presence or absence of diseased appendages.

Treatment.—We now come to the very important question of treatment. Remembering that most cases of this disease have a bacterial origin, and the starting-point is either a miscarriage or a confinement, the necessity of thoroughly emptying the uterus and of using the most stringent antiseptic precautions in all manipulations on the female generative organs cannot be too strongly insisted upon. Anything that interferes with the proper involution of the uterus—such as the patient getting up too soon after labour—should be avoided. I always give my patients after the third day a mixture containing quinine, strychnine, and ergot, and continue this for three or four weeks. It should be the invariable practice of every medical man to make a vaginal examination about three weeks after delivery in order to ascertain the position of the uterus, so that if, as not seldom happens, it be found displaced backward it can be at once gently replaced and kept in its proper position by a well-fitting Hodge's pessary; this pessary need only be worn for a couple of months, at the end of which time the uterus will have regained its normal size and the flexion have been cured. If, however, the displacement be unsought for and undetected until months later, after the patient has been going about and begins to suffer, then the cure of the displacement is very problematical unless and until the patient again becomes pregnant, and this she is, under the circumstances, much less likely to do; besides which the foundation of chronic metritis may have been laid in the subinvolution which usually results from retroflexion. At all events, the patient may have to wear a pessary for months or years, whereas if the displacement had been detected and rectified early a few weeks would have sufficed for a cure. Backward displacement of the uterus after labour and abortion is by no means infrequent. In a paper read by Dr. Herman before the Obstetrical Society in 1892,[1] he said that in the out-patient practice of the London Hospital he found backward displacement in 19 per cent. of the women who had been delivered or had aborted within the previous three months. According to my experience in private practice the percentage is nearly double this, for of the last 50 cases I have attended, 32 of which were multiparæ and 18 primiparæ, I found within three weeks after labour the uterus displaced back in 18 of the cases, or 36 per cent. This shows the importance of being on the look-out for the displacement after a woman has been delivered.

Other prophylactic measures are—(*a*) care in use of the sound, so that no pus be carried into the uterine cavity; (*b*) that in all operations on the uterus strict antiseptic precautions be used; and (*c*) that the use of cold injections immediately after coitus be stringently prohibited. When chronic inflammation of the uterus is in actual existence the treatment to be adopted will depend on what part of the organ is chiefly affected. In all cases it is advisable to keep the bowels acting well by a morning dose of either Hunyadi Janos, Friederichshall, or Vichy water; tonics, especially preparations of strychnine, are indicated; over-fatigue from

[1] Transactions of the Obstetrical Society, vol. xxxiv., p. 14.

too long walks or prolonged standing, as in the case of shop-women, should be avoided. The uterus should be fomented night and morning with a warm douche of at least a quart of water containing two drachms of alum or zinc sulphate. For this purpose a proper douche ought to be used, as the ordinary vaginal injection which a patient gives herself with a Higginson's syringe whilst in a sitting posture is of little use. When the cervical canal is the part affected chiefly we can, after removing the tenacious secretion by means of cotton-wool on a probe, apply some caustic such as pure phenol, iodised phenol, or nitric acid on a cotton-wool probe, or we may introduce a pencil of zinc alum or copper sulphate into the canal and retain it there by a glycerine tampon in the vagina. If the cervix be eroded as well it is a good plan to pass a Ferguson's speculum, then partly fill it with either pyroligneous acid or a 15 per cent. solution of copper sulphate. This is allowed to remain bathing the cervix for four or five minutes, and some of the fluid can be carried into the cervical canal by passing a cotton-wool probe through the fluid. When the cervix is much hypertrophied and congested it has a purplish appearance; in these cases puncturing it in two or three places, and drawing off two, three, or even four ounces of blood gives great relief to the pain and discomfort the patient suffers from. This little operation is only very slightly painful, and can be repeated with advantage several times. There is just one point to be noted—viz., that a small artery may be punctured. If so, the spouting point should be touched with a little liquor ferri perchloridi fortior. Some years ago I punctured the cervix of a lady in my consulting-room one morning, and I was sent for to see her early next day as she had been losing blood all night after using a hot injection the previous evening. I found a little vessel spouting, and at once stopped it with a drop of liquor ferri. The patient expressed herself as greatly relieved from the large loss of blood, and she quickly got well.

When the endometrium is involved, as evidenced by the excessive menstruation and the thin purulent discharge from a tender uterus, two methods of treatment are chiefly in use. One is the application of caustics twice a week to the diseased lining membrane as mentioned for the treatment of cervical catarrh. Now this plan is not altogether devoid of the risk of setting up peritonitis; it is very slow and uncertain in its results, as it must be persevered in for two or three months, and as the cervical canal is small most of the fluid in the cotton-wool gets squeezed out before it ever reaches the diseased endometrium. In my experience it is a far safer and speedier method of cure to give the patient ether, then, having rapidly dilated the cervix up to No. 14 Hegar, to thoroughly remove the mucous membrane down to the muscular coat with a curette. After this is done the uterine cavity is washed out with a hot 1 in 2000 perchloride of mercury solution passed in through a Budin's double catheter. A probe with dry cotton-wool is next introduced to absorb any blood in the interior of the uterus; this being withdrawn another probe charged with iodised phenol is quickly passed in and allowed to remain for two or three minutes. On its withdrawal a pencil of iodoform is inserted into the uterus and kept there by a couple of iodoform tampons in the upper part of the vagina. These tampons need not be removed for forty-eight hours unless there be considerable oozing, which is rare. I much prefer a sharp curette to the dull wire one recommended in books; it is more certain to thoroughly get rid of the thickened and diseased membrane, whilst with ordinary care no possible harm can be done. The after-treatment consists in keeping the patient in bed for ten or fourteen days and ordering an iodine douche (2 drachms to 2 pints) night and morning, at the same time prescribing a tonic with strychnine and ergot. As a rule, very little pain is felt subsequently, so that it is rarely necessary to administer a half-grain morphia suppository. Of the very many cases in which I have adopted the foregoing treatment, in not a single one has any pelvic inflammation ensued; in the great majority of cases the result has been eminently satisfactory. Some require a few intra-uterine applications subsequently, whilst in a small percentage the new endometrium also takes on a villous condition with recurrence of the hæmorrhage and necessitating a repetition of the curetting or, better still, intra-uterine application of electricity. That electricity is distinctly beneficial in some affections of the female pelvic organs, such as the disease we are now considering, some forms of dysmenorrhœa, &c., can only be doubted by those who have not given it a trial. As with all new methods of treatment, it has been said by some enthusiasts to be a cure for almost every disease peculiar to women, as uterine fibroids of all sizes, pelvic exudations, and even uterine cancer; but whilst such magnificent results have not been obtained at the hands of those who have given electricity a fair and unbiased trial, the two cases I am about to relate prove indisputably that its use is followed by most excellent results.

CASE 1.—A woman aged thirty-five was brought to me on Feb. 27th, 1894, by Mr. Coomber of Fakenham, Norfolk. She had six children, the youngest being six years old, and she had had no miscarriage. The patient complained of excessive loss at the periods, pain in the pelvis and over the left ovary, for the last two years, during which time she had been getting thinner and had been obliged to lead the life of an invalid. She had had yellow discharge in the intervals, which for the last three months had been offensive. The patient was a tall, somewhat cachectic-looking and emaciated woman. On examination the uterus was found to be bulky and tender and the cervix was hypertrophied. The sound passed four inches and caused pain and some little bleeding. Nothing abnormal was to be felt in the fornices. Chronic metritis was diagnosed, and I advised dilatation and curettage of the uterus. This was performed by me at the patient's residence in Norfolk. The mucous membrane was very much thickened and dark in colour. The two following periods were less in amount, and then all the old trouble gradually recurred. I advised a course of electricity, and this was accordingly carried out, the patient coming to London for the purpose. She was under treatment three months, and had altogether twenty-nine applications, with the result that she returned home feeling and looking a totally different woman. The periods became perfectly normal in every way, the loss being slight and accompanied with no pain. The uterus on bimanual examination felt much smaller and not the least tender, and the sound can only be made to pass barely two and a half inches. A few days ago I received a very grateful letter from this lady, in which she said she had not felt so well for many years, and that she was putting on flesh so quickly that she was almost afraid to be weighed.

CASE 2.—This was a woman aged thirty-one, who had been married twice and had had two children by her first husband, and none by her present one, to whom she has been married four years. Since her last marriage her periods had been getting excessive, with much pain and clots; the periods lasting seven instead of three days, and about thirty diapers having to be used. In the intervals there was almost constant pelvic pain radiating down the legs and into the back, a yellow inter-menstrual discharge being present. On examination the uterus was found to be bulky, low in the pelvis, the cervix lacerated, together with some follicular degeneration. The sound passed three inches and a half, causing pain and bleeding. I recommended that the uterus should be curetted, but the patient had such a dread of being anæsthetised that she refused to have the operation done. She agreed, however, to undergo a course of electricity, and this was accordingly carried out, with the result that in thirteen weeks the patient was completely cured. My last note is as follows: "The period just over lasted only four days; loss quite moderate, and unaccompanied by pain or clots; on examination the uterus is not tender on ballottement, feels less bulky, but is still rather low in the pelvis; the sound passes just three inches, and does not cause pain or bleeding. A ring pessary introduced in order to raise the uterus. The patient expresses herself as feeling greatly benefited by the treatment."

The method of applying the electricity is as follows. A vaginal douche of 1 in 2000 perchloride of mercury solution is given before and after each application. The patient being in bed and lying on her left side, the intra-uterine electrode, which may be of carbon or platinum (I prefer the latter), is introduced in the same way as an ordinary sound. The patient is now gently turned on to her back and the electrode kept in position by placing an unfolded towel against the end of the handle; the abdominal electrode—the best is, I think, a large carbon one covered with flannel—is soaked in a hot salt-and-water solution, the superfluous fluid is squeezed out, and the electrode applied to the abdomen. A piece of oil silk over it prevents the bedclothes from getting wet. The wires are now joined to a Leclanché battery, in connexion with which is a Gaiffe's galvanometer, in order that the exact amount of electricity administered can be accurately measured. Where a cauterising effect is desired

the positive electrode is passed into the uterus, in other cases the negative is so applied. As a rule, patients can bear a current of from 80 to 100 milliampères, but sometimes, as in Case 1 just related, I have been able to give as much as 220 milliampères. Each application should last from twenty to thirty minutes and be given twice a week. The patient should not get up for at least three or four hours afterwards; it is better still if she remain in bed until the next morning. What the changes effected in the uterine parenchyma are when the negative pole is applied internally I will not pretend to say; the electrode on removal is covered with a serous fluid, and this continues to flow from the uterus for a day or so after each application. That, however, profound changes are effected is proved by Case 1, in which the uterus was in three months reduced in size from four to two inches and a half.

In conclusion, when the chronic metritis is associated with extensive laceration of the cervix the tear should always be sewn up, except perhaps in those cases in which the laceration is accompanied by great hypertrophy and cystic degeneration of the cervix, when probably amputation of the infra-vaginal portion of the cervix by Schroeder's method would be the best treatment. The result of these operations on the cervix is that a distinct diminution in the size of the uterus usually follows.

A CASE OF FŒTAL MALFORMATION SHOWING ECTOPY OF THE LIVER, OMENTUM, AND BLADDER.[1]

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THIS very remarkable case occurred in my private practice last summer, and I beg to submit the following short notes of the case, as they are at once interesting from an anatomical, obstetrical, and therapeutical point of view. At 6.30 P.M. on Thursday, July 6th, 1894, I was summoned to the bedside of a married woman, primipara, and learned that two hours previously her labour pains had set in rather suddenly, the membranes having already ruptured. Examination revealed the presentation as a first cranial, the normal state of the head and the condition of the maternal parts indicating that in a few hours the labour would terminate successfully. The child's head had already passed the pelvic brim, and the pains were occurring at regular intervals. By 9 P.M. the head was bearing well on the perineum and steadily continuing to advance forwards. At this point matters became stationary, and although the head was driven down with each succeeding pain I noticed that it receded much further backwards and upwards after the pains than is usually the case. I therefore determined on delivery with the forceps. The head and shoulders having been born the real difficulty commenced with the birth of the trunk, in which I had to use considerable force in order to disengage it from the mother. The child was born at 10 P.M., proving to be a male, and it is the abnormal condition of the parts mentioned in the heading of the case that I wish to furnish details about. Otherwise the mother made a good recovery. Immediately on the birth of the trunk I noticed that on the *right* side of the abdomen, commencing at the ensiform cartilage, a reddish-brown turgid tumour about the size of the child's head extended down to the iliac and pubic region on the same side. The tumour projected outwards through the abdominal wall for three inches, being rounded externally and to the right, while its left margin was free and lay in a vertical direction, measuring three inches and a half; on the under surface of the free edge of the tumour the omphalo-mesenteric vessels could be followed, thus proving that it was the liver. There was no difficulty in ligaturing the vessels of the cord. Beneath the liver, and apparently fixed to its lower border, another projecting mass could be easily made out, extending down over the pubes and partially covering the genital organs. It was membranous, measured 3 in. transversely, was 4 in. long, and varied from ¼ in. to ½ in. in thickness, being bright-red in colour; it resembled the appearance of fresh blood-clot, only it had a membranous consistence; and on pressure between the fingers no crepitation or gurgling could be discovered. This I concluded must be the omentum. On raising the omentum upwards the cavity of the pelvis could be distinctly seen—the brim of the pelvis most distinctly so. The anterior vesical wall of the bladder was wanting, so that its cavity was fully exposed to the outer surface. The valve-like openings of the ureters could be seen, separated about a quarter of an inch from each other, in the floor of the bladder. There was no urethra, it being only a shallow groove leading forwards in the middle line to the pubis, where it terminated in a small gargoyle-shaped papilla which represented a rudimentary penis. The scrotum was developed in a fairly normal manner, but was perfectly empty so far as the testes were concerned. The anus was situated in its normal position. On July 7th the child's bowels were moved in the early morning, the discharge being meconial. Urine continued

Lower portion of trunk showing abdominal cleft with liver and cavit of bladder.

to be secreted, and soaked the piece of lint and absorbent cotton applied about the pubes. The hepatic tumour was very distinctly less, being reduced to half its former size, its lower border being level with the cleft in the abdominal wall. The omentum only projected downwards to the level of the bladder, and was of a light-red colour; its lower border was found to be continuous with the posterior wall or roof of the bladder, as the mucous membrane of the posterior wall of the bladder could be seen extending upwards to a level corresponding to that of the double fold of the omentum, in such a way that the peritoneal coat of the posterior bladder wall and the omentum were joined together, so that this membranous partition became a closed sac, enclosing and covering the bowels and other abdominal viscera. On the 8th the condition of the liver remained much the same. The child slept well most of the night, and was being fed with diluted milk sweetened with milk sugar. On the 9th slight irritation of the exposed parts around the bladder was noticed, and caused the child to cry frequently. The lower border of the abdominal cleft was painted with olive oil to modify the action of the urine. The milk sugar was stopped, and a weak solution (1 per cent.) of bicarbonate of soda was used instead along with the milk. The difficulty with the urine continued to be kept in check, but on the 14th the lower edge of the liver and the omentum presented an irritable appearance. Benzoated lard on lint was applied to the skin at the edges of the cleft to keep down the irritation. From the 15th, or the ninth day after the birth of the child, till the 21st, when the child

[1] A paper read before the Glasgow Gynæcological and Obstetrical Society on Oct. 29th, 1894.

died, the irritation gradually gave place to ulceration and necrosis of the omentum, and also of the serous or peritoneal surface of the exposed portion of the liver, as it was utterly impossible to keep the exposed parts free from the action of the urine. The child became gradually comatose and died on the fifteenth day, tremors being frequent.

Remarks.—I have to state in conclusion a very remarkable fact regarding the action of cathartic remedies, which completely substantiates and confirms the classic experiments carried out by Rutherford on the lower animals, such as the rabbit—viz., by stimulating the exposed mesentery with various active principles of cathartic remedies and studying the peristaltic action of the bowel induced by their application. In the case just described I have actually on three different occasions—twice on the third day and once on the fifth day—applied by means of a fine camel-hair pencil a small quantity of castor oil to the omentum, merely flicking it over, with the result that there was evacuation of the child's bowels in from five to seven minutes, showing the speed with which absorption must take place in the abdominal cavity—far greater, in fact, than can be conceived. In every instance the motions were fluid and yellowish-green in colour. The engraving (which is from a photograph) represents the post-mortem appearances twenty-four hours after death. The position of the omentum and liver is very well shown, as is also the interior of the bladder, in the floor of which indications of the valve-like openings of the ureters can be seen. The other anatomical peculiarities are quite apparent. The sloughs on the omentum and surface of the liver appear to be lightish-grey in colour, as also the patches of slough on the edges of the abdominal cleft.

Hillhead, Glasgow.

SOME CONSIDERATIONS ON THE CHLOROFORM QUESTION, SUGGESTED BY THE REPORTS OF THE HYDERABAD AND "THE LANCET" COMMISSIONS.

BY T. LAUDER BRUNTON, M.D., F.R.S.

(*Concluded from page 89.*)

GROUP II.—DEATHS IN THE STAGE OF STRUGGLING.

IN the second stage, the stage of struggling, death is more likely to occur from the effect upon the heart of simple choking than from any other cause. It is probable that struggling is usually induced by a feeling of suffocation, and that if the anæsthetic were sufficiently diluted, struggling would not occur. In this stage a certain amount of danger may also arise from the efforts of the assistants to restrain the struggles of a powerful patient because, in trying to keep him quiet, pressure may be inadvertently made on his chest or his respiratory movements otherwise interfered with. A practical but difficult question sometimes arises in this stage: whether to push the anæsthetic during this choking stage or to allow the patient partially to recover. Some administrators consider that it is best if the patient be strong and healthy rather to push the anæsthetic, so as to overcome the spasm which causes the choking, provided always that there is no obstruction to the passage of the air. Others prefer to stop the anæsthetic until the patient has got over the choking, and then to administer it again. There is more danger in this stage with chloroform than with ether, because with ether it seems necessary to produce a certain amount of asphyxia to aid its anæsthetic action. If ether is given along with a large quantity of air it is very difficult, at least in animals, to produce anæsthesia, but it is easily produced if asphyxia is brought about at the same time by limiting the supply of air breathed along with the ether vapour.

GROUP III.—DEATHS DURING THE STAGE OF ANÆSTHESIA.

During full anæsthesia deaths are most likely to occur from carelessness. It is very unlikely that deaths from shock should arise in this stage except in very rare cases. But even when the patient is thoroughly well under there seems to be a danger of reflex stoppage of the pulse through the vagus. This occurs in comparatively deep anæsthesia for operations on the eye, on joints, and sometimes for operations upon the intestinal canal, and especially upon the rectum, and urinary passages. There seems to be a tendency even during complete anæsthesia for reflexes to persist from these parts, so that both the respiration and circulation may be affected by the reflex irritation of these parts during complete anæsthesia. Anæsthesia thoroughly complete is very advisable in such cases. The chief danger in this stage seems to arise from the anæsthetist being present in body and absent in mind. His attention should always be undivided. With instruments and operations he should have no concern. If his attention is diverted to watching the operation he is apt to forget what is going on with the patient's respiration, and this is one of the causes of death from anæsthetics. They are alluded to in this report and cases. We had in the Hyderabad Commission some striking examples of this. The experiments were generally very successful, and though it was not always intended that the animals should be chloroformed to death, every now and again the animals died before the experiment was over with a curious regularity, when we did not want them to die. These unwished-for deaths did not occur in the morning, when the operators were all attentive, but generally in the afternoon, when the things were hurriedly put together and when the anæsthetist was not so attentive to his work as he might have been. They occurred more frequently when the anæsthetist who usually gave the chloroform was absent at the hospital, and when somebody else who was not accustomed to the duties was administering the drug. On two or three occasions with the ordinary anæsthetist deaths occurred, but this was only when we were doing something new in which he was much interested. He became engaged in watching the operator. The same thing happened to me when I was giving chloroform and doing an operation at the same time. We wanted to make some comparative experiments, and I was doing tracheotomy upon one monkey and another operator on a second. In attending to the operation I forgot to attend to the respiration, and allowed the chloroform to remain too long, and the animal died. The successful anæsthetist is the man who seems able to concentrate his attention most of all upon the patient and attends to nothing else. It is the man who attends to his own business and leaves other people's alone who is the most successful, and this is the best rule for the administration of anæsthetics.

HOW SHALL THE ATTENTION BE DIRECTED?

The next question which arises s the mode in which the anæsthetist's attention should be given. This is the point around which there has been great discussion—whether he is to attend to the respiration or to the circulation, or to both. It is interesting to inquire whether these clinical reports throw any light on this subject. The figures are given thus:

Statement.	Cases.
Cardiac failure	227
Respiratory failure	80
Simultaneous failure...	77
Total	384

Thus in all only 384 cases had statements appended regarding heart failure and respiratory cessation out of a total of 637 which have been noted, leaving 253 unaccounted for. But this report throws much light upon the conditions under which the "untoward" cases occurred in which recovery took place. On this point it is very definite. It says:—"The immediate symptoms of danger in these cases are practically in every case respiratory or circulatory. We are told that in a very large proportion of cases the respiration failed before the heart or pulse showed signs of flagging, and it will be seen that the measures adopted for resuscitation were in most cases those which were applicable to cases rather of cessation of respiration than to those of cardiac failure" (p. 1112). This is also borne out by the records of the administrations of the A.C.E. mixture. "Respiration appears in the majority of cases to have given out before the heart." These groups of cases are important as indicating that the detection of the respiratory failure at the appropriate moment led in nearly every instance to a catastrophe being averted. Now the evidence in favour of anæsthetics producing death from the respiration is this. In almost every case where anæsthetics pure and simple have been given by inhalation death is found to occur from the respiration, and the heart continues to beat for a considerable length of time afterwards. Chloroform injected directly into the heart, or driven into the lungs by

artificial respiration, would cause it to stop, but this could not be done by natural inhalation. The moment the chloroform begins to act upon the respiratory centres the respiration ceases, so that the anæsthetic cannot be introduced into the blood in sufficient quantities to stop the heart. What is to be feared is the combined action of the anæsthetic and of asphyxia.

In the face of this clinical evidence, supported as it is by a vast mass of experimental evidence, it seems to me that, if any choice has to be made between attending to the respiration and watching the circulation, only one answer can be given. My advice is: "Attend to the respiration and leave the circulation alone." The anæsthetist should not attempt to feel the radial pulse; but there is no objection to putting the fingers upon the temporal pulse, because it forms a convenient way of supporting the head of the patient. Without actually attending to the temporal pulse, if the finger rests upon the temporal pulse any changes which may occur will make themselves evident to the consciousness without interfering with the watch upon the respiration. If the pulse were to become flickering or to stop, one would at once detect it by the finger on the temporal artery, and might thus be led to examine the condition of the respiration before it was too late.

How to watch the Respiration.

There is sometimes a fallacy in watching the respiration, arising from apparent movements of the chest when there is very little air entering the lungs. It is advisable in all cases to hear the respiration. The patient may appear to be breathing very freely indeed while there is not a particle of air entering the lungs. It is possible for the upper air passages to be blocked by the tongue or by food getting into the larynx, or by the glottis becoming closed so that no air passes through it, and yet the movements of the thorax may be going on while the patient is dying from asphyxia the whole time. The only ways of ascertaining that air is entering the lungs freely are either to see the movements of the thorax and abdomen together or to hear the air entering and leaving the chest. The necessities of the operation often completely prevent both thorax and abdomen being seen together, and while the thorax is heaving the abdomen may become retracted or *vice versâ*. The entrance and exit of air from the nose and mouth may be heard by the unaided ear of the anæsthetist, or by the ingenious adaptation of a binaural stethoscope to the mouthpiece of an inhaler.

Group IV.—Deaths in the Stage of Recovery.

Of this group of fatalities some very interesting records have been tabulated, notably in Case 20, on p. 1114, and Case 57 on p. 1115, in which the patient laughed and talked after the operation. This ceased, and suddenly pulse and breathing were observed to have stopped. On p. 766, Case 162, it is recorded that "difficulty of breathing came on about one hour and a half after operation and no restorative measures were of avail." Many other instances of this form of dissolution are recorded. In the stage of recovery stoppage of the respiration has also to be guarded against, and the administrator has here to be particularly watchful that the air-passages are not stopped by fluid or solid matter passing down them, more especially as during this stage vomiting is apt to occur. Greater care has to be exercised in this respect towards the termination of the operation. An operation should not be done on a full stomach, because that organ when distended interferes with the respiration by its bulk as well as by its own weight. Further, a full stomach tends to give rise to vomiting, and the contents, when brought up, are apt to obstruct the air passages and thus prevent respiration or cause neuroparalysis. It has been advised to give a little brandy or some other stimulant shortly before the operation. In many cases this has done good. If the patient's circulation is much depressed this seems to be a useful thing to do, but in ordinary cases, and where the circulation is not exceedingly feeble, the patients are perhaps better without stimulants.

Group V.—Death some Days after the Operation.

In those cases in which death has occurred three or four days after the operation I have been unable to discover any means by which their occurrence may be foreseen and avoided. It has struck me that one cause of death may possibly be the poisoning of the individual by ptomaines formed in the body, because the mode of death in these cases is a very curious one. It occurs quickly, almost without any forewarning symptoms, and examination of the body reveals nothing but a little fatty degeneration of the heart. I have thought that these deaths were due to the presence of some poisons in the blood which had killed the patient, not primarily but secondarily, by fatty degeneration; that, in fact, these deaths might be looked upon as resembling deaths from phosphorus poisoning, in which fatty degeneration of the organs is caused by phosphorus. In those which occur several days after the administration of chloroform the fatty degeneration of the heart and death have been attributed to the action of the chloroform *per se*, but I have seen one case of death in a precisely similar way after the administration of ether. The idea that this fatty degeneration is due to some toxin may be regarded as fanciful, but it is at any rate worth while to observe cases, and especially cases of abdominal surgery, with a view to ascertaining its truth or falsehood.

Ptomaines and Fatalities.

The report throws some interesting light upon this by recording Cases 59, 60, and 61. During the operation the pulse became irregular and sank alarmingly. Nélaton's method was adopted with apparent success, and for a time the process had to be repeated four times, and the patient did not get over the symptoms of chloroform poisoning for three days. Case 60 recovered also after three days, and Case 61 after thirty-six hours. Among the untoward cases, after the administration of nitrous oxide gas, a similar occurrence (Case 2) is reported. The patient walked 400 yards to the station, and in the train was seized with a faintness, pallor, and active convulsion, became unconscious, and did not recover completely for several weeks. Professor Poehl of St. Petersburg told me that he had been making a number of investigations upon the urine, having special regard to the alkaloidal substances present in it, and he was able to tell by the condition of the urine whether an anæsthetic would be badly borne or not. As a rule, it was badly borne when a large number of alkaloids were present, but if there were few alkaloidal substances the patient could take the anæsthetic without fear. This would seem also to explain some other curious facts, such as that although a patient has taken anæsthetics well on several previous occasions he may yet die from the administration of the anæsthetic. From the report we learn that of the cases examined 11 males who died under chloroform had taken it safely once before; 11 females and 13 males more than once; and 1 is stated to have died from chloroform after having been under its influence on eight previous occasions. There is, of course, one cause of death that must not be overlooked. If the person has taken the drug three or four times without the least risk the operator or administrator may become careless upon the next occasion; but still it is quite possible also that the difference may occur in the individual and may depend upon something that the patient has had in his food or formed in his system.[1]

The Influence of the Geographical Position.

It has struck me a good deal when thinking over anæsthetics that in choosing one the decision depends a good deal upon the geographical position of the operator. Writers who live in the Northern States of North America state that ether is the anæsthetic which ought always to be employed. Those in the Southern States choose chloroform. Those who live in India, Egypt, and other hot climates will, as a rule, prefer chloroform. There is one marked exception to this general law, which is that in Edinburgh ether is very rarely employed, and chloroform has there always held its ground. On trying to make out why this should be I was at first sorely puzzled, because ether has one great disadvantage over chloroform in its irritating action upon the air passages. Ether tends to cause great secretion from the air passages and a rather severe bronchitic condition—so severe sometimes that some operators have given up its use on account of its after effects; and yet in cold countries, where this objection would tell more than in hot climates, ether is preferred. One reason of this, no doubt, is the difficulty of keeping ether in hot climates. But it occurred to me that it is just possible that the food of the people may have some effect upon the action of the anæsthetics, and it seemed to me that in Edinburgh there have been more fatalities of late years than there used to be. Now, there is one change which has come about within the

[1] Compare Experiments 31, 81, 84, 104–109, 119, 146, 147, 148, 156–161, 163, 164, 165, 170, 183, and 184 of the Hyderabad Commission.

last twenty years: the introduction of foreign meat has taken place, and large quantities—quantities which now are really enormous—are imported from America and Australia, so that meat-eating is much more common than before. More people eat meat, and those who were accustomed to eat meat seem now to eat more as a sort of general average per head. The consumption of meat per head has greatly increased within the last twenty years.[2] In hot climates people do not eat much meat, and even dogs do not get a chance of eating much meat, so that we must always remember that experiments made in hot climates differ not only in regard to warmth of the atmospheric air, but in regard to the food upon which the men and animals have lived, and I think it quite possible that many of the accidents which have occurred during the administration of chloroform have been due really to the condition of the patient as regards alkaloids present in the blood.

GENERAL CONCLUSIONS.

(1) Experiments on animals have conclusively shown that chloroform given by inhalation and not blown artificially into the lungs, kills by paralysing the respiration. (2) Clinical observation has shown that cases of simple danger without death during anæsthesia are due to failure of the respiration. (3) Cases of death may arise from the same cause, but may also be due to stoppage of the heart (syncope) or to stoppage of the heart and respiration together (neuroparalysis). (4) The most common cause of neuroparalysis has been found by Casper to be throttling, strangling, or drowning, which kill by neuroparalysis as often as by asphyxia. (5) Anæsthetics have no tendency to produce neuroparalysis except when they are given in such a manner as to irritate the respiratory passages either mechanically or chemically. (6) On the contrary, they tend to lessen shock. (7) During imperfect anæsthesia, both at the very commencement of administration of an anæsthetic and during recovery from its influence, choking may occur and cause death by neuroparalysis as well as by asphyxia. (8) The neuroparalysis is the result which is most to be dreaded, as simple asphyxia may be usually recovered from if artificial respiration be maintained. (9) It is therefore most important in the administration of anæsthetics to avoid anything which is likely to interfere with respiration, as such interference may act like throttling and cause death by neuroparalysis. (10) During complete anæsthesia, the reflexes being almost or entirely abolished, there is little risk of neuroparalysis, but the nerve-centres being weak there is more of asphyxia. (11) At the commencement of administration and during recovery, when the reflexes are present but may be deranged, the danger of death from neuroparalysis is greatest, and the respiration then requires to be watched with especial care. (12) Although there may be no objection to the anæsthetist keeping his finger on the temporal artery, and thus unconsciously watching the pulse, yet the respiration must be his main care, and anything that will withdraw his attention from it is studiously to be avoided. (13) The practical rules for administration, according to Syme and Lister, as given by Surgeon-Lieutenant-Colonel Lawrie in the Report of the Hyderabad Commission and in THE LANCET of Jan. 18th, 1890, are correct.

THE DIAGNOSIS OF SMALL-POX.

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ACCURACY in the diagnosis of those infectious diseases which are notifiable to the sanitary authority has now acquired an importance which it is difficult to over-estimate. The majority of well-regulated communities have not only adopted the Notification Act, but have provided special isolation hospitals for the treatment of small-pox. It is the common experience of all such hospitals that from 5 to 10 per cent. of the cases notified as small-pox are really the victims of some other disease. These cases of "wrong diagnosis" are a source of grave anxiety to all concerned. They cast a serious responsibility on the hospital staff. They are even more annoying to the practitioner notifying the case, who, according to recent experience in Dublin, may find himself the defendant in an action for damages. Almost equally harassing is the mischievous gossip which arises from that section of the public which appears not only to expect, but to demand infallibility from their medical adviser. Failure to recognise and notify a mild case of small-pox may lead to even more disastrous consequences, as, in addition to the risk of an action for not notifying, there is the possibility of the undetected case giving rise to a house epidemic and possible grounds for an action for damages incurred thereby. During the last three years I have had exceptional opportunities in Birmingham and elsewhere of realising the responsibilities and difficulties involved. Not only have over 3000 cases been sent to the hospitals of which I have had charge, but it has been my lot to visit, on behalf of the medical officer of health, every case notified as "possible small-pox." It may not be out of place to remark how very much more easy it is to avoid friction in revising a diagnosis if the case is seen at the patient's own home. There is no unpleasant dread that the patient may have been exposed to infection, and there is no grumbling about injury to health from removal to hospital. In those frequent appeals to the Local Government Board as to the right of the medical officer of health to visit notified cases, no distinction is made between those diseases which it is intended to isolate in hospital and those which are to be treated at home. There can be no doubt among those who have had any experience that visiting the former cases before removal greatly facilitates the working of the Notification Act. If the case goes to hospital the diagnosis has to be revised, and this revision can be far more pleasantly and far more conveniently done at home.

Errors in the diagnosis of small-pox are readily explained. Apart from the intrinsic difficulties occasionally involved general practitioners are further hampered by the fact that small-pox has become a comparatively rare disease, while those cases which do occur are hurried off to special hospitals where only a limited number of men have the opportunity of studying their clinical history. The following notes are the result of a study of some 500 cases in which a provisional diagnosis of small-pox was referred to me for revision, and are written with full appreciation of the difficulties of those who find themselves betwixt a very Scylla and Charybdis while endeavouring conscientiously to discharge a legal obligation and a public duty.

My list of "wrong diagnoses" includes in order of frequency varicella, measles, scarlet fever,[1] erythema exudativum, syphilis, acne vulgaris, sweat eruptions (especially sudamina), impetigo contagiosa, influenza, psoriasis, urticaria, generalised vaccinia, vaccinia lichen, varicella gangrænosa, papular eczema, pemphigus, rötheln, glanders, scabies, purpura, folliculitis, antipyrin rash, iodide rash, herpes zoster, herpes facialis, sycosis barbæ, and no obvious disease. It would hardly repay to discuss the differential diagnosis in each of these diseases. It must be remembered that during most of the time during which my notes were made, small-pox was epidemic, and certain provisional diagnoses were due to very excusable panic—e.g., acute psoriasis, herpes facialis in the course of continued fever, sudamina in rheumatism, and so forth. In many cases the fatal omission to *see all the rash* was responsible for the opinion arrived at. This was especially true of varicella. Most common of all, perhaps, was absolute reliance on the presence or absence of some particular so-called "pathognomonic sign"—e.g., umbilication, pain in the back, or what not. The diagnosis is best discussed in relation to the various stages of the disease, and I shall adopt the very convenient convention of the Clinical Society[2] of limiting the term rash to the initial erythemas and purpura, while "eruption" is reserved for the true variolous exanthem.

1. *Diagnosis in the pre-eruptive stage.*—A combination of vomiting, pyrexia, and lumbar pain can be regarded only as suggestive, but would be highly suspicious if small-pox were prevalent and would certainly justify isolation of the patient and vaccination of those associated with him if there were a definite history of exposure to infection about twelve days previous to the onset of symptoms. In most cases a certain diagnosis will be made on the appearance of the eruption, though in very rare cases there is no exanthem.[3] As regards

[2] A friend informs me that the increase in twenty years from 1873 to 1893 amounts to 13½ per cent.

[1] Here the error was, except in one case, that of mistaking small-pox for scarlet fever.

[2] Supplement to Transactions, vol. xxv., p. 173.

[3] These cases of variola sine variolis are very puzzling. If presenting typical symptoms and occurring after exposure to infection they should be isolated and revaccinated.

the prodromal rashes, the general scarlatiniform rash gives rise to most trouble. In about a dozen instances this variety has been diagnosed as scarlet fever and sent to hospital as such. As far as the rash itself is concerned it is often absolutely indistinguishable from scarlet fever, while pyrexia and vomiting are common to the two diseases. Severe lumbar pain[4] and epigastric pain are greatly in favour of small-pox, especially if circum-oral pallor, strawberry tongue, and adenitis are absent. The condition of the throat is of most importance. In small-pox at this stage the throat is either unaffected or one finds a varying number of bright-red macules[5] about the size of a split pea scattered over the soft palate and pillars of the fauces. This is very typical and quite different from the œdematous injected arch seen on the palate in scarlet fever. More typical still is the appearance of opaline vesicles in the same region. Careful examination of the throat will, at any rate, arouse suspicions of small-pox. Morbilliform prodromals are often mistaken for measles, but these rashes are rarely seen on the face, are not so papular as measles, and are not accompanied by catarrhal symptoms. Urticarial prodromals are fortunately uncommon. They are extremely deceptive, and a certain diagnosis can only be made after the appearance of the eruption. It is important to remember that a prodromal may take this form. If a patient who has been exposed to the infection of small-pox develops pyrexia, with an urticarial-like rash, he should certainly be placed in quarantine to watch developments. The so-called "bathing-drawers" rash, which may be erythematous or petechial, and is confined to the groins and axillæ, affords certain grounds for diagnosing small-pox if accompanied by the ordinary symptoms of that disease.[6] The diagnosis of purpura variolosa is very easy if the existence of this type is borne in mind. The rash may not be distinguishable from ordinary purpura, but is usually accompanied by the petechial "bathing drawers" rash. This, combined with more or less pyrexia, hæmorrhages from mucous membranes, hæmorrhagic chemosis of the ocular conjunctiva, extreme pigmentation of the lower eyelids, slight lividity, complete consciousness, with a general aspect of intense weariness and prostration, form a clinical picture which can hardly be mistaken.[7]

2. *Diagnosis in the early eruptive stage* (*i.e., stage of papules and papulo-vesicles*).—The eruption usually appears on the third day, is distinctly shotty on the fourth, and vesicular on the fifth day of the disease. Any eruption following constitutional symptoms which has this course is very probably small-pox, and is almost certainly so if the eruption is accompanied by a fall in temperature, if it is most marked on the wrists and face, if the developed papulo-vesicles are about the size of a split pea and of a greyish-blue colour.[8] A small-pox eruption is for the most part uniform in development except that the lesions appear earlier on the wrists and face than on the trunk and legs. The subsequent evolution of the rash follows the same course, so that vesicles on the wrist or face may be accompanied by papules on the legs. Some of the vesicles will usually show umbilication, but far too much importance has been attached to this sign, which is frequently absent altogether. Measles is frequently taken for confluent small-pox and *vice versâ*. Attention to the following distinction will prevent mistake. The eruption of small-pox most commonly appears on the second or third day, that of measles on the fourth or fifth day of illness. Coryzal symptoms of measles and especially a laryngeal cough are absent in small-pox. The temperature tends to fall in small-pox, but rises in measles as the eruption develops. The condition of the soft palate and fauces is very different in the two diseases; in measles there is general injection combined with mottling, while in confluent small-pox there are flat opaline vesicles or at any rate the red macules previously described.[9] Too much dependance is perhaps placed on "Grisolle's sign"; small-pox is not shotty in the first few hours when it is most likely to be mistaken for measles, and measles papules can occasionally be just felt when the skin over them is stretched. In case of doubt time will solve the problem, as after the lapse of twenty-four hours some of the papules will have become vesicular if the disease is small-pox.[10] Typical varicella, in which the clear superficial vesicles look like drops of water, has little resemblance to any stage of small-pox. The eruption is evidently quite superficial in chicken-pox, apparently not deeper than the Malpighian layer of the epidermis, while in small-pox the true skin is usually involved. Constitutional symptoms are little marked as a rule in chicken-pox, while they are rarely absent in small-pox. Too much reliance cannot, however, be placed on this. A temperature of 102° to 103° F., with some backache and vomiting, is quite compatible with an uncommonly severe case of varicella. The eruption is usually the first symptom noticed in varicella. It differs from small-pox in being most marked on the trunk, and comes out in irregular crops instead of having the orderly progression noticed in small-pox. It is distinctly vesicular from the very first day, and as the disease advances it exhibits a medley of papules, vesicles, pustules, and scabbing lesions in every part of the body. Umbilication[11] is occasionally seen, and appears to depend on accidental relations to sweat glands or hair follicles, but is very rare apart from the pseudo-umbilication referred to later. One is sometimes asked, Could not a given varicella eruption be modified small-pox? Abortive small-pox vesicles always exhibit a typical infiltrated papular base, which is absolutely distinct from the hyperæmic areola of varicella. It may be repeated that most mistakes are due to not seeing the whole eruption.

Papular syphilides are occasionally diagnosed as small-pox, but the different constitutional symptoms, the onset, the polymorphic character of the rash, cachexia, general glandular enlargement, and primary sore are sufficient to make the distinction once suspicion is aroused.

3. *Diagnosis in the late eruption stages; vesico-pustules and scabbing lesions.*—Varicella is again the stumbling-block. Polymorphism and history of symptoms and development are again all important. It cannot be too strongly insisted that early papules and scabbing lesions are never contemporaneous in small-pox, though frequently so in chicken-pox. Typical scabbing varicella lesions are common between the scapulæ and on the loins. Such a lesion is irregular in outline, varies in diameter from one to three lines, has a central depressed scab[12] consisting of dark brown or almost black sugary-looking dried serum, and is quite unlike the yellowish smooth scab seen in unmodified small-pox, and is still more unlike the reddish-brown circular discoid scab found on the apex of a papule in abortive small-pox. It need hardly be pointed out that the scarring consequent on the two diseases is very different, but I have known the diagnosis of chicken-pox to be doubted because a certain amount of subsequent scarring resulted. Scarring in chicken-pox appears to be due to a secondary ulcerative process, and not to the lesion being primarily situated in the cutis vera. This ulceration leaves irregular, pigmented, flat, smoothed, punched-out depressions, instead of the foveated or conical pits seen after small-pox.

The diagnosis from acne vulgaris is occasionally difficult, but the pre-eruptive symptoms, uniformity of rash, presence of lesions on the scalp, wrists, and the palate, and absence of comedones will usually clear up any doubt. Great care is needed to avoid missing mild small-pox occurring in a patient already suffering from acne. I have a very lively recollection of being misled by such a

[4] A certain amount of back-ache is of course common in most pyrexial conditions, and severe lumbar pain is absent in about 50 per cent. of all cases of small-pox.

[5] These macules subsequently develop into the flat, opaline vesicles of small-pox. The enduanthem is never distinctly papular, and the vesicles are at most very slightly raised above the general surface of the mucous membrane.

[6] Very occasionally scarlet fever patients exhibit a marked concentration of rash on the lower part of the abdomen and groins. In these cases the throat, tongue, and adenitis settle the diagnosis.

[7] Undiagnosed hæmorrhagic small-pox has often been the starting point of a localised epidemic. I remember one such case which was certified as death from "German measles." Some friends from a distance who attended the funeral developed small-pox twelve days later.

[8] This is generally very well seen in the vesicles on the wrist. They are absolutely different from the straw-coloured vesicles of varicella. The difference in colour is due to the varying thickness of the epidermic roof of the vesicle.

[9] A minutely granular condition of the soft palate is not uncommon in measles, and indeed in health, but should not be confused with the macules and vesicles of small-pox. As already stated, raised papules are practically unknown on the palate in small-pox.

[10] For practical purposes measles may be said never to become vesicular. So-called vesicular measles is of the nature of an epiphenomenon, and consists of minute miliarial vesicles occurring in rare cases at the centre of the papules.

[11] Absence of umbilication appears to depend on varicella vesicles being altogether in the epidermis proper, where there are no strands of tissue, epithelial ducts, and so forth, to tie the vesicles down.

[12] This pseudo-umbilication is a very common source of fallacy, as Dr. McVail recently pointed out. (Journal of State Medicine, vol. i.) True umbilication may, however, undoubtedly be seen in varicella.

combination, and not being set right until typical small-pox lesions made their appearance among those of acne. The rash of glanders *per se* is certainly very like pustular small-pox, and vomiting and pain in the back are common to the two diseases. In glanders, however, the eruption does not appear till well on in the second week; it comes out in crops, very rapidly pustulates,[12] and is generally distributed without any predilection for face and wrists. More important than all, glanders is a discrete eruption, but exhibits constitutional symptoms as grave as if it were confluent small-pox. Once glanders is suspected, the history of association with horses and, if needs be, a bacteriological examination will clear up the case.

The only case of iodide rash with regard to which I have notes of any difficulty was in the instance of a patient suffering from acute Bright's disease. The renal pain and vomiting of nephritis simulated small-pox, but the grouped pustular eruption situated on an inflamed base was easily recognisable as due to iodide or bromide. Inquiry soon elicited the fact that he had been taking iodide of potassium for chronic pleural effusion.

It is customary to lay stress on the vaccinal state as affording presumptive evidence. Personally, I prefer to be unbiased and make up my mind apart from any such consideration, as it is impossible to lay down any absolute rule as to the duration of the immunity enjoyed by the vaccinated. Still, it may be remembered that a copious vesicular eruption in a well-vaccinated child or occurring more than fourteen days after revaccination is very unlikely to be variola. Vaccination rashes, especially vaccinia lichen, are now and then mistaken for small-pox. More important is it to remember that successful vaccination performed a few days previously to the appearance of a given eruption does not exclude small-pox. I have notes of one such case in which the presence of normal vaccine vesicles led to the diagnosis of generalised vaccinia—a diagnosis which was even maintained when the "cow-pox" spread to several members of the patient's family. It is not, however, my intention to dwell on my own or on others' mistakes. "We are none of us infallible, not even the youngest of us," and I will conclude by bearing my ungrudging testimony to the conscientious and unselfish way in which the members of our profession have endeavoured to aid the sanitary authority by the early notification of small-pox. Early notification is of vast importance in prophylaxis, but adds immensely to the difficulties of those on whom the responsibility is made to rest.

Birmingham.

ON THE CAUSE OF ROTATION IN SCOLIOSIS.[1]

BY C. B. KEETLEY, F.R.C.S. ENG.,
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IT is acknowledged by all except a few pathologists who would seem never to enter a museum that the peculiar shape of the scoliotic spine is almost entirely the sum of changes in its component vertebræ—i.e., it is only in a small degree the result of changes in the ligaments and articulations. What are the changes in an individual vertebra? They are greatest in a certain very small number, chiefly those at or near the centre of each curve. They have been many times described; for example, by Bouvier, by Nicoladoni, and by Lorenz, the last two authorities having in their minds during the description each a special theory to account for the "rotation." Lorenz's description is very minute. If we look at the front of a vertebra chosen from the centre of a curve with convexity to the right, we should expect to find the outline of its body wedge-shaped, with the apex towards the concavity of the spinal curve, and more or less marked, with a horizontal groove on the left side, as if the force of growth, having been checked perpendicularly, had spread laterally, so as to form two lips. If the same vertebra be viewed from behind it will probably be found that, although not strictly symmetrical, especially as regards the articular processes, the wedge-shape is not at all pronounced, and may even be not discoverable except by measurement. If, now, a third view be taken of the vertebra—viz., from above—it will, if at all a typical case, be seen to be strangely "slewed," as it were, in such a manner that the posterior segment of the vertebra, including the pedicles, the transverse processes, the laminæ, and the spinous processes, appear to have struggled to retain their normal relations and positions in the particular human frame to which they belong, while the body of the vertebra has been equally determined to deviate to the right. "Struggle" is, in one respect at least, a good word, because it suggests a certain amount of confusion, such as might produce the minor varieties in the pathological anatomy of such bones as I am describing. But the chief peculiarities are both orderly and almost uniform. If it be granted that the prime cause of scoliosis is, in young children, ordinary rickets, and in older ones and in youths "rachitis adolescentium," it cannot be forgotten that in rickets it is at the so-called "epiphysial" cartilages that the greatest abnormality of growth, leading to the major part of each rachitic deformity, takes place. Now the epiphysial cartilages of the vertebral body are placed above and below the main bony masses, but the cartilages of growth of the transverse processes and the spinous process, and in fact of the whole segment of the vertebra posterior to its body, are placed horizontally with regard to one another. There is also the equivalent of an epiphysial cartilage in each vertebral body near the root of the pedicle. Hence rachitic deformity would have a much greater tendency to produce lateral inclination in a vertebral body than in the more posterior constituents of the vertebra. Further, the external projection of the transverse and articular processes gives them an increased mechanical power, like that of buttresses and of cross-trees, to check a tendency to lateral inclination. On the other hand, the comparative thinness from side to side of the pedicles, arches, and spinous processes offers diminished resistance to horizontal "slewing" of those parts. Therefore, the fact that the layers of cartilage of growth or epiphysial cartilages above and below each vertebral body do not extend backwards to the posterior parts of the vertebra is the prime cause of torsion, and the arrangements of the cartilage of growth of the pedicles, transverse and spinous processes, together with their shape, greatly contribute to the production of torsion by facilitating "slewing" of these parts in a horisontal direction. The only explanation of torsion which I have been able to find at all analogous to that just given is Lorenz's. He finds the cause of torsion in the existence of the cartilage of growth in each side of the posterior part of the vertebral body near the base of the corresponding pedicle. That this is a most important factor I grant, but I think it causes, not the torsion, but the great degree to which torsion may reach. It is a specially important fact that near the junction of the anterior with the posterior segment of each vertebra there is a cartilage of growth which is, like others of its kind, no doubt specially sensitive to rachitic influences. But I maintain that unless the vertebral bodies had their principal cartilages of growth placed above and below them, they would have no more tendency to lateral curvature than the rest of the vertebræ, and therefore the action of the pedicle cartilage would not come into play.

Grosvenor-street, W.

[12] In one case of which I have notes it was pustular on the third day.

[1] A paper read at the opening meeting of the British Orthopædic Society on Jan. 31st, 1895.

NOTE ON THE LIMERICK POISONING CASE.

BY SIR CHARLES A. CAMERON, F.R.C.S. IREL., D.P.H.,
MEDICAL OFFICER OF HEALTH OF DUBLIN.

ON July 3rd, 1895, about seventy inmates of a convent and boarding-school in Limerick became very ill after dinner, and for several days suffered from vomiting and purging of a severe character. Three ladies died and many of the other inmates were for several days in a precarious condition. Poison being suspected, portions of the vomited material and dejecta were sent to me for examination on July 5th, together with a portion of corn-flour which it was suspected might contain poison, but none was detected in it or in the other matters sent to me. Suspecting the case to be one of ptomaine poisoning I telegraphed for portions of everything the

patients had had for dinner, but the only items available were sugar and sodium bicarbonate, both of which were pure. It has been clearly ascertained that the poison was not in the meat used, for some persons who had partaken of it were not ill, and the history of the carcass that furnished it was made out and negatived the hypothesis of unsoundness or disease in it. It appears that a custard formed part of the dinner and that all who partook of it sickened. The cook (one of the sufferers) states that she prepared the custard as follows: "Tuesday, July 2nd: Took four quarts of skimmed milk of previous night, boiled it, added about half a pound of loaf sugar, added two tablespoonfuls of cornflour and boiled again. This was done in a tin vessel. 3 or 4 P.M.: Resumed making of custard; beat up eight or ten eggs, all fresh except one which had a reddish-brown colour but no bad smell, poured them into milk which was then about the temperature of tea, and then poured into earthenware bowl; removed to a cold place during night. Wednesday, 3rd, 9 A.M.: Custard had become quite thin, of consistence of cream; poured it over seven or eight quarts of strawberries, about one and a half quarts of which had been gathered on previous night, whipped the whites of eggs used above, with one pound of sifted sugar and spread over strawberries and custard on glass dishes." That the strawberries were the cause of the illness is negatived by the fact that three or four persons who took gooseberries and not strawberries with the custard were amongst the sufferers. The inquiry is therefore narrowed to the question, Was the *materies morbi* in the milk or eggs. It would seem that some surprise was manifested by the custard remaining thin. When I first heard of this fact I thought the fluidity might be due to the liquefying influence which certain bacilli have on gelatine and albuminous matters, though the rapidity of their action in this particular case seemed surprising; I therefore had a custard made similarly to that described by the cook, and found that it remained as thin as rather thin cream. This want of consistency was, however, due to the albumin of the eggs not having been congulated by heat, for when my custard was heated to near the boiling point (as should always be done) it became on cooling quite thick. That a highly poisonous substance (tyrotoxicon) is generated in milk (not necessarily very stale) is well known. In the Limerick case the milk was at least two days old when consumed, as at eleven o'clock on the previous day it was skim-milk of "the previous night." It was, however, boiled, and after the addition of cornflour and sugar again boiled. The question is, Could the milk in the presence of sugar and cornflour have generated tyrotoxicon from the time it was boiled at eleven o'clock on Tuesday until it was produced at dinner at one o'clock on Wednesday? The time of the year was favourable to the fermentation of the unstable mixture. The temperature of the mixture was favourable to incubation of micro-organisms. Suspicion falls more strongly on the eggs. I have learned that they were market eggs, and had been purchased four or five days before they were used. Though not putrid, they were more or less stale, and one had a curious colour, described by one person as resembling that of claret. Now after the addition of the eggs to the luke-warm milk, sugar, and cornflour, there was no further heating, and it is clear that the egg albumin was not coagulated. There is reason to believe that the discoloured egg was cracked, and if so micro-organisms had access to its interior. The viscera of two of the patients who succumbed to the attack were examined for ordinary poisons, with negative results. A substance was extracted from them which gave all the characteristic reactions of ptomaines. The quantity available for examination was altogether insufficient to differentiate the ptomaine or ptomaines present from others of which there seems to be a very large number. I am not aware that in any case of ptomaine poisoning the ptomaine was extracted from the viscera and identified. In this case it is much to be regretted that neither the custard nor the matter ejected from the patients on the first or even second day of their illness was available for bacteriological and chemical examination. A fourth patient died yesterday, and there is only one now whose state causes anxiety. The inquest was held yesterday, and the verdict was in accordance with my evidence.

Dublin, July 17th.

ST. THOMAS'S HOSPITAL.—The Corporation of the City of London has granted a donation of 200 guineas to the special fund for the closed wards of this hospital.

ON THE MECHANICAL TREATMENT AFTER PARTIAL EXCISION OF THE LOWER JAW.

BY F. NEWLAND-PEDLEY, F.R.C.S. ENG.,

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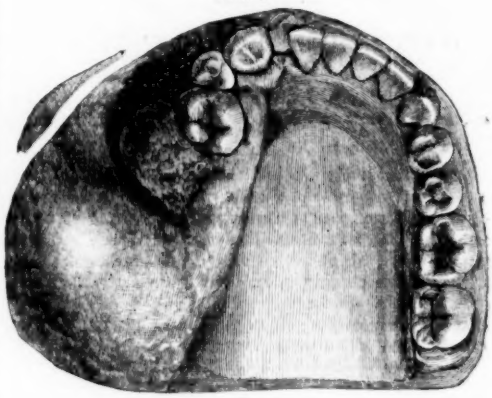
No great difficulty is experienced in artificially restoring portions of the jaw lost from disease or removed in surgical operations, provided that sufficient bone be left to maintain the dental arch and give support to a denture. Even when a large fragment of the jaw, including the base, is lost from necrosis, we may hope that in a young patient the bone will be reproduced, and the treatment consists in holding the fragments at rest by means of a splint whilst repair is progressing. The most difficult cases, however, are those in which it becomes necessary to remove the ascending ramus or half the jaw in order to arrest a malignant growth, for the remaining fragment quickly undergoes remarkable displacement, falling inwards until it rests upon the tongue, and occupying a position in the median line of the mouth. Here, as a rule, it becomes fixed by cicatricial tissue, rendering the jaw useless as a masticatory organ and occasioning great permanent deformity. Few of these cases have come under my treatment during fifteen years of hospital practice, and doubtless excision of large segments of the lower jaw for advanced malignant growths in elderly patients only prolongs life for a time, and mechanical treatment is not attempted. This, at least, has been my experience, for I cannot recall a single previous case in which treatment was commenced early enough to be successful; the rest, without exception, were failures, because the remaining segment of the jaw was firmly fixed, the muscles were shortened, and further surgical operation seemed contra-indicated. Unsatisfactory results could be averted if the dental surgeon was consulted before the bone became fixed, as may be proved by a case recently treated at Guy's Hospital.

A girl aged twelve years was admitted under Mr. L. A. Dunn for a large sarcoma of central origin, situated in the left side of the lower jaw, extending backwards to within half an inch of the sigmoid notch and forwards to the second bicuspid tooth. The annexed model of the growth (Fig. 1)

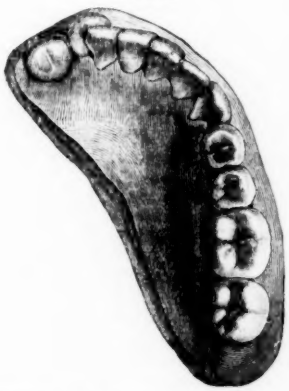
FIG. 1.



was taken by Mr. Parfitt, who was dresser to the case. The whole of the ascending ramus was removed and nearly half the body of the jaw, reducing the dental arch to the limit indicated in Fig. 2. The wound healed rapidly, and Mr. Dunn, foreseeing the deformity that would necessarily result from the operation, transferred the patient to my care for mechanical treatment some ten days after the operation. I then found the characteristic displacement, which, however, yielded to pressure; but it was clear to me that any contrivance to keep the lower jaw in place must take its fixed point from the upper jaw, for no continuous pressure should be applied over the recent wound. I therefore made a Gunning splint which covered

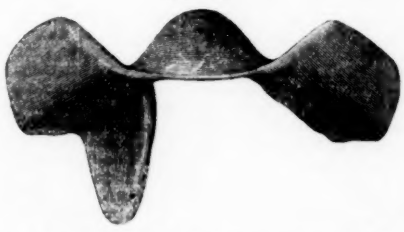
the upper and lower jaws, uniting them together; but the contrivance was unsightly and would have been a great impediment to mastication; so, after several attempts, I made a modification of Gunning's splint by covering the upper jaw with vulcanite and gold, and affixing to it a shield of vulcanite passing almost vertically downwards and preventing the lower jaw from deviating inwards when the mouth was opened to an ordinary extent. The patient can

FIG. 2.



remove the plate easily, and can replace it by pushing the jaw into the shield with her finger. She can now masticate her food satisfactorily and is looking in good health. In constructing one of these contrivances for a child twelve years of age it must be remembered that the jaw is far from fully developed, and allowance must be made for erupting teeth; on the other hand, the erupted teeth must be kept in their positions by antagonising with the plate, or they will rise unduly in their sockets. The age of sixteen is usually

FIG. 3.



considered quite early enough for a patient to wear a denture, and I purpose retaining the use of the present contrivance for about four years. At the end of that period I shall probably find some dense cicatricial tissue occupying the site from which the bone was removed, and this may prove firm enough to support a denture and keep the right side of the jaw in place. Fig. 3 is from a drawing of the plate now worn.

Devonshire-place, W.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of directors of the society was held on July 10th at 8 30 P.M. Sir James Paget, President, took the chair. One fresh application for a grant was read from a widow and assistance given. The death of a widow had occurred who had received grants since June, 1877, and had had £1247 in all, her husband having paid thirty-eight guineas to the funds of the society. One new member was elected and the deaths of two were reported. A sum of £1264 was voted to be distributed among fifty-three widows, nine orphans, and four orphans on the Copeland Fund. A grant of £52 10*s.* was made to a widow under By-law 70. A legacy of £200 Stock, duty free, was announced from the executors of Dr. Bissett Hawkins. The expenses of the quarter came to £62 11*s.*

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A NOTE ON A HEAVY BRAIN.

BY GEORGE COWIE GRANT, M.B., C.M. ABERD.,
JUNIOR ASSISTANT MEDICAL OFFICER, BIRMINGHAM CITY ASYLUM, RUBERY HILL.

AT a post-mortem examination recently made at the Birmingham City Asylum, Rubery-hill, a brain of very large dimensions was examined. It belonged to a man aged forty-three, who suffered from epilepsy for seven years and died from congestion of the lungs following upon a succession of fits. He was admitted to Winson-green Asylum in April, 1892, suffering from epileptic dementia, and was in January, 1893, transferred to Rubery-hill. His sister stated that the fits began about seven years previously, and occurred for some time only at long intervals; that prior to his having fits and for some time afterwards he was a very intelligent man, much given to reading books and discussing politics. He had been fairly strong, but suffered from periodical headaches. Occasionally he went in for heavy drinking bouts. The necropsy disclosed the following. The circumference of the head above the eyebrows was 25⅝ in. The bones of the skull were not unduly thickened. The dura mater was thickened throughout, and at several points was firmly adherent to the skull-cap. The falx cerebri was ossified from its attachment to the internal occipital protuberance as far forward as the fissure of Rolando. The pia arachnoid was milky and opaque and as thick and tough as an ordinary dura mater, while its vessels were varicose and tortuous. It was adherent to the brain in several places, but mostly so in the frontal region. Recognising that weighing a brain with so thickened a pia arachnoid would give quite an erroneous idea of its real weight, the membrane was removed with as little brain substance adherent as possible. Clear of all membranes and free from all fluid—as it was afterwards found that the ventricles contained none—the brain weighed sixty-seven ounces. The convolutions were plump and well-formed. To the naked eye and microscopically no pathological changes were evident in the organ except an enlargement of both choroid plexuses of the lateral ventricles and a partial ossification of the left one. In the free extremity of this plexus several delicate plates of bone were deposited. I might here remark, from what I have observed myself and from what I have learned from men of long experience in asylums, that it is the practice in many asylums to weigh the brain with the pia arachnoid attached. Had such a method been followed in this particular case quite an erroneous result would have been arrived at, as the pia arachnoid scaled four ounces. It would be interesting to know whether the brain weights published in THE LANCET of June 15th are the weights of the brain alone or the brain *plus* membranes.

Rubery-hill.

A CASE OF SULPHONAL POISONING IN A DIPSOMANIAC.

BY W. WRIGHT HARDWICKE, M.D. ST. AND.

A MARRIED woman, aged thirty-seven, separated from her husband owing to her habits of intemperance, had been abstemious under moral restraint for about three months, when, on May 24th, 1895, she showed signs of an approaching attack of alcoholism. She was watched carefully for a time, but owing to illness and removal of her attendant she was left in charge of a maid. Her first dose, on June 1st, was about one pint and a half of methylated spirit, partly procured from a lamp in the house; then two-pennyworth of the same was obtained from a lamp shop (about six ounces), the druggists in the district having received notice not to serve her; thereupon, her thirst seemed to be so extreme that she

resorted to some painters, from whose can of turpentine she took a drink. She next discovered a bottle containing 100 tabloids of sulphonal, containing five grains in each, which had previously been taken from her, and which she had received by post; these she chewed up in her mouth one after another till she had swallowed fifty-three (equal to 265 gr.). About 5 P.M. the same day she was found by the maid (who had unfortunately been obliged, owing to domestic duties, to leave her a great deal to herself) in a state of stupor on the floor, and was carried to bed. At 11.15 P.M. I was summoned to her, and found her sleeping on her side with her knees drawn up, and the pupils slightly contracted and insensible to light. When roused she smiled graciously and lapsed off to sleep again; she tried once to raise herself in bed, when she fell powerlessly back again. Next day the legs were found to be extended, and the soles of the feet were arched in a state of extreme flexion. The bowels were confined. She slept from 5 P.M. on June 1st till 5 A.M. on the 4th—sixty hours—and did not regain speech till the 7th and the power of locomotion till the 9th. This case is interesting as showing the irritation produced to the plantar branches of the post-tibial nerve—presumably by the sulphonal—and the long period that elapsed before the toxic flexion of the soles made itself manifest, thus showing the slowness of the action of the drug.

PAROSTEAL LIPOMA CLOSELY RESEMBLING A PERIOSTEAL SARCOMA OF THE FEMUR.

BY FREDERICK PAGE, M.D. EDIN., M.R.C.S. ENG.,
SURGEON TO, AND JOINT LECTURER ON CLINICAL SURGERY AT, THE ROYAL INFIRMARY, NEWCASTLE-UPON-TYNE.

IN Mr. Bland Sutton's work on Tumours nine reported cases of parosteal lipomata are referred to. Another has just come under my observation. A woman some five-and-forty years of age showed me a few days ago a swelling on the inner side of the lower end of the right thigh, which she told me she had noticed slowly growing for about four years. It was evidently closely connected with the bone; the superficial veins over it were enlarged, and the swelling closely simulated a periosteal sarcoma. It turned out, however, to be a parosteal lipoma about the size of a flattened goose-egg, encapsuled, and so closely connected with the periosteum that it could not be separated from it. The case is worth recording for more reasons than one. I know of only one other example of parosteal lipoma of the femur—namely, that recorded by Mr. D'Arcy Power in the Transactions of the Pathological Society of London. The great interest of the case I am reporting, however, lies in the resemblance the tumour bore to a sarcoma—a resemblance which might have led to amputation of the limb instead of the removal of the growth.

Newcastle-upon-Tyne.

A MEMORIAL BED.—On Monday, July 15th, a meeting of the Ladies' Association of the Great Northern Central Hospital was held in the board-room, the occasion being the presentation of a bed endowed with a sum of £1050 by the Ladies' Association to Dr. William Cholmeley, the consulting physician to the hospital, in appreciation, as the commemoration plate says, of "many years' devoted and unselfish labour." The present building originated in a little private hospital started in 1856 by Mr. F. S. Statham, which was taken over by a committee of management in 1857. Dr. Cholmeley was one of the first members of the medical staff, the others being the late Sir William Savory, Dr. Handfield Jones, Mr. William Adams, and Mr. George Lawson; the last two are happily still alive. The Hon. Reginald A. Capel, who made the presentation, referred to the history of the hospital, and pointed out how for thirty-eight years Dr. Cholmeley had worked for the hospital both as physician and on the committee of management, and how the present building with all its modern improvements was largely due to his exertions. He concluded by saying that a memoir to a man's worth during his life was, he thought, preferable to one erected after his death. Thanks were returned on behalf of Dr. Cholmeley, who has of late been in somewhat feeble health, by his brother, the Rev. C. H. Cholmeley.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

ST. MARY'S HOSPITAL.

A CASE OF PLEURAL AND PERICARDIAL EFFUSION FOLLOWING ENTERIC FEVER AND ATTENDED WITH THE EXPECTORATION OF A FIBRINOUS CAST OF THE BRONCHUS; PARACENTESIS OF PLEURA AND PERICARDIUM.

(Under the care of Dr. CHEADLE.)

HOLSCHER reported 2000 fatal cases of typhoid fever in which post-mortem examination was held. Lung complications had proved fatal to the following extent: œdema of the lungs in 15 per cent.; bronchitis, 10 per cent.; lobular pneumonia, 8 per cent.; croupous pneumonia, 7 per cent.; and hæmorrhagic infarction of the lungs, 6 per cent. Plastic bronchitis was not met with, but in 15 of them tracheotomy had been performed, usually for perichondritis of the larynx. Landgraf considers that little importance can be attached to the marginal ulcers sometimes seen, especially about the epiglottis. Other deeper ulcerations, which occurred not only on the epiglottis but within the larynx, might be complicated with perichondritis, and were of grave import. The rarest lesions were ulcers which, from the time of their appearance, the infiltration of their bases, and the undermining of their edges, must be considered specific typhoidal lesions. The operation of paracentesis of the pericardium is but rarely required in cases of effusion into it. Dr. West collected a series of 79 cases in 1883 in which it had been performed, and of these 36 recovered. He considered that it was not only justifiable, but could be done without any great danger. It is not, however, an operation which is likely to be lightly undertaken, especially in rheumatic cases. Dr. Churton has reported a case of hæmorrhagic pericarditis, with serous effusion into the right pleura, in which he performed aspiration of the pericardium thirteen times and of the pleura seven times. The patient was a man aged forty-six, and at one time 46½ oz. were withdrawn. For the notes of this case we are indebted to Mr. Athelstan J. H. Saw, late house physician.

The patient, a man aged twenty-four, was admitted to St. Mary's Hospital on Oct. 3rd, 1894, complaining of shortness of breath and swelling of the abdomen and legs. His father died of phthisis. The history of the present illness is as follows. On May 12th, 1894, he was taken ill with enteric fever, and the temperature ranged between 100° to 103° F. There were typical stools and spots during the illness. The attack was not severe, and there was not an unusual amount of bronchitis. On June 26th the patient, having previously progressed satisfactorily, was attacked by pericarditis and pleurisy, after which the pulse was lost at the wrist. The patient's condition remained unsatisfactory, and at the end of July he went to Torquay. Whilst there he had œdema of the feet and legs, and eventually returned to London. On admission to hospital the patient appeared cyanosed. The veins in the neck, especially on the right side, were distended, also over the front of the chest. There was great œdema of the legs and of the chest wall and abdomen. He was unable to lie down in bed, especially on his right side. The pulse at the wrist was very small, hardly perceptible on the left side, but slightly larger on the right; it was easily compressed. The apex beat of the heart was neither seen nor felt. The cardiac dulness extended one finger's breadth to the right of the sternum, but could not be determined to the left and above owing to surrounding dulness. The sounds were heard very distinctly at the apex, but were louder at the base. The first sound was weak. He had an irritable cough, with but little expectoration. There was marked dyspnœa,

especially in the recumbent posture and when he was lying on the right side. The left side of the chest measured 19½ in. at the level of the nipple. The right side measured 17½ in. The right lung was hyper-resonant over the whole of the right front and the back with good entry of air. The percussion note was absolutely dull over the whole of the left front and back. The entry of air was much impaired, especially at the base. The breathing was bronchial over the left front and the upper part of the left back. Vocal fremitus was diminished especially at the left base. The vocal resonance was slightly œgophonic at that base with marked whispering pectoriloquy over the front on that side. The abdomen was resonant. The liver reached four fingers' breadth below the costal margin. The specific gravity of the urine was 1026, acid; one-eighth albumen. A small quantity was passed of high colour. There were no casts. On Oct. 3rd an exploring needle was introduced into the left pleura and clear fluid removed, after which it was aspirated very slowly and with but slight pressure, 50 oz. of clear serous fluid being removed about 3.30 P.M. Immediately after the aspiration the patient started coughing incessantly, with expectoration of frothy, slightly blood-stained sputum. Inhalations of vapor coninæ and a hypodermic injection of one-sixth of a grain of acetate of morphia with one-fiftieth of a grain of sulphate of atropine gave no relief. He expectorated about a pint of this frothy serous fluid, which on examination was found to contain mucin and a large quantity of albumen. Notwithstanding the coughing he expressed himself as feeling better. About 10.45 P.M. he was seized with urgent dyspnœa, became pulseless, markedly cyanosed, his face being bathed in perspiration. His condition was extremely critical, and he was given hypodermically in quick succession five minims of liquor strychniæ, two minims of liquor atropiæ, twenty minims of ether, and a capsule of nitrite of amyl to inhale. Artificial respiration was performed and inhalations of oxygen were commenced as quickly as possible, from which he derived great relief. An hour and a half later (12.30 A.M., Oct. 4th), during a fit of coughing, he expectorated a large fibrinous cast of a bronchus with its ramifications, after which he was much easier. The inhalations of oxygen were kept up at intervals until 2.30 A.M. He passed a fair night, the breathing being easier. The cough was not so troublesome, though he still expectorated a frothy serous fluid. On the 6th the colour was better. The cough was not so troublesome. He had coughed up several (about half a dozen) blood casts of the bronchi, some of them branched, smaller than the fibrinous one alluded to above, much softer, and easily broken. The pulse was 126, small, irregular, slightly stronger than the day previous to the aspiration. The temperature, which was 101° on the night of the 5th, was 94·8° next morning. There was a Skodaic note over left front. The breathing was bronchial, and fine crepitations were heard during inspiration. Bruit d'airain was not obtained. The heart sounds were slightly more distinct. Note on percussion of the left back was still impaired. Air entered more freely. Crepitations were heard all over the left back during inspiration. The patient was ordered a mixture containing two grains of carbonate of ammonia, five minims of tincture of digitalis, and one ounce of chloroform water every four hours, also a hypodermic injection of five minims of liquor strychniæ every four hours. The patient improved somewhat and coughed up no more casts, but the fluid in the pleura gradually reaccumulated, and on Oct. 9th he was aspirated again, 50 oz. of clear fluid being withdrawn. After the aspiration he had a good deal of irritable cough. On the 17th the left pleura was drained by means of a Southey's tube, and 27 oz. of clear fluid drawn off. The patient bore this much better than the aspiration, and the subsequent cough was not nearly so troublesome. This was repeated on the 20th, when 48 oz. were removed. On the 24th the heart sounds still remained distant, and the area of cardiac dulness was much enlarged above the second space and a finger's breadth external to the right margin of the sternum and just external to the left nipple line. It was decided to aspirate the pericardium. The needle was introduced in the fifth space just internal to the left nipple line, and the bottle was only partially exhausted; 14 oz. of turbid serum were removed, quite different in character from the clear fluid obtained from the pleura, which became very thick towards the end of the aspiration. Microscopical examination of the fluid showed dead leucocytes and granular débris. After the aspiration the patient felt much relieved, and the dulness on percussion extended above to the fourth rib to the right margin of the sternum and just internal to the left nipple line. The heart sounds became a good deal more distinct and were accompanied by a to-and-fro crackling sound, which was not, however, due to air in the subcutaneous tissues, for pressure with the stethoscope made little or no difference. On Oct. 25th the left pleura was drained by Southey's tube, and 26 oz. of clear fluid removed without exciting any cough. On Nov. 8th the left pleura was aspirated by means of the bottle and vacuum; 35 oz. of clear fluid were removed, the last ounce being, however, blood-stained. An hour after the aspiration the patient had severe fits of coughing which became very distressing. The sputum was blood-stained, and of a frothy, serous nature, resembling that after the first tapping on Oct. 5th, but no fibrinous casts were expectorated. On Nov. 10th the pulse was distinctly better in force and volume. The apex beat of the heart could not be seen or felt. Dulness extended above to the third space, to the right to mid-sternum, and to the left half an inch external to the nipple line. At the apex the heart sounds were heard more distinctly. The first sound was somewhat sharp and followed by a second sound. There were adventitious sounds. The cough was still troublesome, and the expectoration was blood-stained. The note over the whole of the left front was good and resonant. A resonant note was obtained over the whole of the left back, but towards the base the note was not quite so good as on the right side. The entry of air was good except at the base. There were fine crepitations below a point midway between the spine and angle of the scapula during inspiration. The liver was one finger's breadth below the costal margin. On Nov. 15th the patient went home against advice. His general condition had improved very markedly, there being neither dyspnœa, distension of veins, nor œdema. Since his return he had been heard of several times through the medical man who was attending him. The last letter, dated March 1st, 1895, says:—"The patient remains in very much the same condition. Pulse quick, feeble, but regular. Heart sounds feeble and distant. No increase of pericardial dulness and no bruit. He has evidence of a slight amount of fluid at the left base, and since his discharge from the hospital has been aspirated twice, 36 oz. and 37 oz. respectively being obtained. He suffers from periodical attacks of very severe fits of coughing, when he becomes very cyanosed and veins much engorged. He expectorates small quantities of tenacious mucus, but has never expectorated any more fibrinous casts. He has marked signs of back pressure, his legs and genitals being very œdematous."

Description of cast.—The length of the main stem before subdivision was about 1¼ in.; the diameter was about ¼ in. From the main stem there sprang about seven branches, each of which underwent still further subdivision and terminated in fine filaments. The colour was pure white. In consistence it was firm and tough. On section it appeared solid throughout and revealed a laminated structure. After placing in spirit it shrank considerably. Microscopically it showed a beautiful reticular arrangement, with some leucocytes entangled in the meshes. When stained by Weigert's method for staining fibrin the whole section took on the purple stain.

Remarks by Dr. CHEADLE *and* Mr. SAW.—We were at first disposed to think that the pleural and pericardial effusions might be due to the pressure of a mediastinal tumour. The subsequent history of the case negatives that view, we think, although it does not positively exclude it, for after the removal of the fluid we were never able to detect any evidence of a tumour. We also obtained a history of the case from the medical man who attended the patient at the onset of the illness, and there can be no doubt but that the patient had enteric fever complicated by pericarditis and pleurisy. There are two cases on record in which fibrinous bronchitis occurred either during or subsequently to typhoid fever, and in view of the invariable accompaniment of bronchitis in typhoid fever it is not surprising that casts of the bronchi should form, for no doubt one of the most potent disposing causes of fibrinous bronchitis is ordinary catarrhal bronchitis. But there may be another explanation of the occurrence of fibrinous bronchitis during typhoid fever. We know that ulceration of the upper part of the respiratory passage—viz., the larynx—is a by no means rare occurrence in typhoid fever. Only a few months previously to the admission of this case Dr. Cheadle had under his care a patient

suffering from typhoid fever, on whom tracheotomy had to be performed, owing to obstructive dyspnœa from this cause. Fagge[1] says: "Sometimes a thin pellicle of lymph has been found lining both the interior of the larynx and the epiglottis, and still more rarely a membranous layer resembling that of diphtheria." In a case under the care of Hoffman[2] tracheotomy was rendered necessary by the formation of a polypoid blood clot which hung down into the interior of the larynx. The cause of this ulceration, whether due to a specific poison or to the prolonged pyrexia, is uncertain. With this, however, we are not concerned. The fact remains that it is of fairly common occurrence, and if it occur in the larynx it is conceivable that it may also occur in the bronchi. Now von Gumoens[3] found in a necropsy on a case of fibrinous bronchitis that there was deep ulceration of the trachea and bronchi, which doubtless was the cause of the fibrinous exudation. In this way, therefore, we may explain the occurrence of fibrinous bronchitis during typhoid fever. That the cast had lain in the bronchi for some considerable time was, we think, manifest from its whiteness and toughness, differing entirely in its appearance from those coughed up the following day, which were softer, more yellow, and tinged with blood, resembling very closely "ante-mortem clot." There can be no doubt that ten hours previously to the expectoration of this cast there was no obstruction in the bronchi leading to the right lung, for there was a hyper-resonant note over the whole of this lung, with free entry of air; but it is very probable that it was lying in the bronchi of the left lung, which was collapsed, the auscultatory signs being concealed by the pleural effusion. Another explanation is possible, although we think not probable, as to the origin of this cast—namely, that after the aspiration of the left pleural cavity, the pressure being taken suddenly off the pulmonary vessels transudation of serum into the alveoli occurred, which was indicated, indeed, by the abundant serous expectoration; that this coagulated and became moulded in the bronchus; and that it was owing to the blocking of the bronchi that the urgent symptoms ensued about 11 P.M. But had this been so we cannot suppose that the cast would have been as firm and tough as it was. Neither, assuming that it was formed in the left bronchus, do we think it would have caused such urgent symptoms; for the left lung, must have been lying collapsed for months from the pressure of the pleuritic fluid, and can have been of but little value for respiratory purposes; hence the blocking of its bronchus would make but little difference. On the other hand, had so large an obstruction occurred suddenly in the bronchus of the right lung we think the patient must have inevitably succumbed, for the left lung was collapsed, and there was also considerable pericardial effusion. What seems far more probable is that the fluid transuded after the aspiration and loosened the cast which was lying in the left bronchus, and that the violent coughing detached it, forcing it higher up the respiratory passages and so causing it to obstruct bronchi previously free. From the size of the cast the main stem probably occupied a primary division of the left main bronchus, probably that leading to the left lower lobe. Unfortunately, no clue as to the exact site occupied is afforded by the physical signs, for previously to the aspiration they were simply those of pericardial and pleural effusion with collapse of lung, and after the sudden onset of urgent symptoms prior to the expulsion of the cast our attention was directed to alleviating the patient's symptoms and so no precise and accurate examination of the lungs was made. The question arises, Why did the fluid in the pleural cavity reaccumulate so often? We think this was owing to the inability of the lung to expand, being perhaps bound down by adhesions, or so long collapsed that a return to the normal was impossible.

SIDCUP COTTAGE HOSPITAL.

TWO COMPLICATED CASES OF INGUINAL HERNIA IN WOMEN TREATED BY RADICAL CURE.

(Under the care of Dr. G. W. DAVIS.)

IN the first of these cases of inguinal hernia the presence of a second sac is of interest, although such a condition is not very uncommon, especially in the case of the male. It is probable that an old hernial sac became obliterated at the neck by inflammatory adhesion, and that it was afterwards pushed down by the descent of the hernia for which the operation was performed. The presence of the fluid in the first sac was either caused by extension of the inflammatory process from the second, in which the adherent omentum and intestine were found; or it may have been the site of a hydrocele. The second case is an example of a different arrangement of the two sacs, in which the second hernia had passed by the orifice of the first, which had become contracted in a way not infrequently seen in old-standing herniæ which are tending to become cured by contraction of the neck of the sac. Le Dran noted this tendency of empty hernial sacs, and found the entry of the sac contracted in several instances, especially where the patients had worn effective trusses.

CASE 1.—This case was remarkable, firstly, in having a distinct double sac, each of which contained fluid; secondly, in the embarrassment caused by the extremely tough adhesions; and, thirdly, in the absence of urgent symptoms in the face of the existence of strangulation. A widow aged forty-two years was seen by Dr. Davis for the first time for her hernia on June 3rd, 1893, at 10 P.M. She complained of having had a swelling in the right groin for ten years. This tumour had caused some discomfort during the whole of its existence and had never entirely disappeared; it had given rise to more pain for the last three years, during which time she had followed the calling of a laundress. Especially had she suffered from the swelling for the previous three days, and each day's suffering had been more acute than that of the one preceding. The swelling was egg-shaped and of the capacity of about one and a half ounces. It was very tense and both tender and painful, but not markedly so. There had been occasional vomiting during the day, but not feculent. The bowels had acted slightly in the morning. No food had been taken during the day. Efforts at reduction, both by taxis and ice, having been already made, it was decided to admit her at once into the Sidcup Cottage Hospital, which was accordingly done at 11 P.M. on June 3rd. Dr. Burrell gave chloroform, and Dr. Lionel Burrell assisted at the operation. The usual incision having been made and the superficial tissues incised, a thin-walled sac tense with fluid bulged forward; this, being nicked and freely opened, disclosed a second sac of a bluish-black hue; in pinching up this second sac in order to ascertain its thickness its distension caused it to burst and the fluid which had given rise to its colour to escape. The sac contained a portion of gut just protruding through the ring and firmly attached to the sac by old fibrous adhesions on all sides except internally, where it was adherent to a nodulated mass of omentum, and this omentum in its turn was attached to the sac wall. Some considerable time having been spent in endeavouring to break down the adhesions between the gut and sac without much result, the adhesions between the gut and omentum were broken down, so that the fingers could travel with difficulty along the canal to the internal ring, at which was felt a tightly constricting narrow orifice; this being cut in the usual manner, the omentum was dealt with by first drawing it further out and then ligaturing it in two parts with chromicised gut, removing the part above the ligature and returning the stump into the abdomen. The adhesions on the gut were now separated from the sac, and the gut and adhesions returned into the abdomen. The canal being examined and found to be clear, the sac was ligatured with silk and removed, the stump being returned. The wound, after being irrigated with a 1 in 2000 perchloride of mercury solution and dusted with iodoform, was brought into accurate apposition by means of silkworm gut sutures; the dressing was of double cyanide gauze and pine-wool pad. A drainage-tube was inserted and removed in twenty-four hours. The patient made an uneventful recovery, with the exception of having much distressing retching and vomiting of clear, olive-green, bilious matter. A light truss was procured, and the patient left the hospital. In November, 1894, there was a very slight impulse during severe coughing.

CASE 2.—This case was remarkable from the complicated nature and number of the protruding masses. These were, firstly, an elongated mass of fat, perhaps subperitoneal; secondly, an encapsuled mass of omentum; and, thirdly, a sac which was empty and had so constricted a neck as to resemble the sac of a water-bottle hydrocele, but had apparently no intimate connexion with the round ligament. A young woman aged twenty-six had suffered for three years from a swelling in the left groin. During the night and before

[1] Text-book of Medicine, 1891, vol. i., p. 158, article on Enteric Fever.
[2] Quoted by Fagge, loc. cit.
[3] Schweizer Zeitschrift fur Medecin, 1854.

rising she was not conscious of there being anything wrong, but during the day, or in the performance of any work, the swelling appeared and became a continuous source of discomfort and occasionally of pain. On examination of the swelling on Oct. 7th, 1894, it appeared to consist of two parts—viz., one irreducible, but defined with difficulty, and the other not reducible in the ordinary sense, but rather insensibly disappearing during the exercise of the pressure incidental to examination. These conditions were not easy to appreciate, and from the first impression a truss was ordered, but the endeavour to wear it caused great pain and even retching; it was therefore at once discarded and an operation advised. A further examination in consultation with Mr. F. Shapley having confirmed this opinion, the patient was admitted on Oct. 16th into the Sidcup Cottage Hospital. The operation had, however, to be postponed on account of menstruation. For a few days previous to the operation she was kept a good deal in bed and given a dose of Æsculap every morning. Dr. Crombie gave chloroform, and Mr. C. de S. Hoar assisted. The patient commenced to retch at once, but no appreciable impulse was communicated to the tumours. An incision three inches long was made, crossing the external ring and extending in the direction of the canal. A soft mass of fat the size of a walnut was almost immediately found at the anterior part of the wound; on the fat of the superficial fascia having been removed from this mass, it was found to be encapsuled and to have a pedicle passing through the external ring. The tough capsule enclosing the mass having been opened and stripped from it, a mass of nodulated omentum was disclosed; the pedicle, being drawn up, was ligatured with catgut, cut off with scissors, and allowed to retire through the canal. A second long and narrow mass of fat, non-encapsuled, was found above the first and was taken to be some of the subperitoneal fat; its pedicle was ligatured as was that of the other mass, and the stump was returned. Further dissection disclosed an empty, tough, fibrous sac capable of holding about one and a half ounces of fluid; this after careful inspection was opened and found to be continuous with the peritoneum lining the canal, along which the little finger could be inserted with difficulty. The pedicle of this sac was tied with a threefold ligature of catgut, the sac being removed and the stump returned to the inner ring. Finally the pedicle of the fibrous covering of the omental mass was ligatured and removed, and the stump remained within the external ring. The wound surfaces, having been cleared of a gland and some redundant pieces of fat, were covered with iodoform and the two surfaces brought into accurate apposition with four deep sutures of silkworm gut and five superficial sutures of horsehair. The dressing was of double cyanide gauze wrung out of a 1 in 20 carbolic acid solution and covered with a pine-wool pad. A great deal of retching followed the operation and continued throughout the night, and was the next day associated with green vomit. At 1.30 P.M. the patient fell asleep, the vomiting having ceased; it, however, recommenced and was again very distressing throughout the night. The temperature was not high (99·2° F.), the pulse was 98, and there was no tenderness of the abdomen or tympanites. A hypodermic injection of half a grain of morphia relieved the vomiting. The tongue was very much furred. On Nov. 4th the patient appeared to be going on quite well. The temperature was 100 on Oct. 26th, but fell to 99·4° on the 27th, was the same on the 28th, and from the 29th to Nov. 4th remained normal, the bowels being opened daily. On Nov. 5th, exactly fourteen days after the operation, the patient, who had been up for six days, was seized with a rigor accompanied by pains in the back and head, and the temperature reached 103°. The wound was a little tender and there seemed to be some infiltration in the underlying tissues, but nothing sufficient to justify one in opening the wound. She was therefore sponged and given salicylate of soda. On Nov. 6th the temperature was 100°, on the 7th 99·6°, and on the 8th it fell to normal and did not rise again subsequently. During the night a quantity of pus and serous-looking fluid escaped into the dressings. On the 9th a drainage-tube was inserted through the wound in its entire length. On the 25th, all efforts to close the sinus through which the drainage-tube had been inserted having failed, cocaine was injected and the sinus was opened upon a director. The after-progress was extremely tedious. The wound was packed each day with iodoform gauze, but after healing to about half its extent it appeared to become chronic and to remain so in spite of applications of sulphate of copper, of nitrate of silver, of chloride of zinc, &c. Finally, the application of lead paper as a dressing seemed to hasten the process, and the application of a leaden shield with a depression, which was made for the purpose, fitting into the wound, certainly did some good. On Dec. 26th the wound had healed.

Remark by Dr. DAVIS.—A remark is called for on account of the omission in each case of any attempt to close the canal by suture. In Case 1 the length of time already expended in breaking down adhesions led me to omit this precaution. In Case 2 the canal did not appear abnormally patent, and the sutures were omitted by design.

Medical Societies.

EDINBURGH OBSTETRICAL SOCIETY.

The Condition of Midwives in Scotland.

A MEETING of this society was held on July 10th, Dr. A. H. FREELAND BARBOUR President, being in the chair.

Professors A. Martin (Berlin), A. J. C. Skene (New York), and Pinard (Paris) were elected honorary Fellows.

Photographs of a Fœtus sent by Dr. Farquharson (Newcastle) were exhibited, showing a case of anencephaly, retroflexion of the spinal column, cleft palate, and hare-lip. There was a distinct family history of spinal and brain disease.

Dr. D. BERRY HART opened the discussion on the Condition of Midwives in Scotland, with special reference to the question of registration; Should midwives be registered in Scotland? Lord Balfour's Bill had passed the second reading in the House of Lords, but the Dissolution had postponed its progress. He had little doubt it would be reintroduced, and it might be considered in the meantime. It only applied to England, but if passed it would soon be extended to Scotland and Ireland. It was named the Act for the Compulsory Registration of Midwives. Lord Balfour had shown an undoubted evil: the returns reported 800 000 to 900,000 births yearly in England, and one-half of these were attended by midwives only, and these midwives were wholly or almost wholly untrained. This was the only European country where midwives were not registered. It was estimated that there were 10 000 to 15 000 midwives in England and Wales, and uneducated. In the Bill as introduced the midwife was defined as one who should only attend natural labour; but in the amended Bill no definition was given. He then explained some portions of the Bill. The Bill had defects, and the question attempted to be solved was difficult, and he thought the best plan was to obtain a satisfactory compromise. We must admit that 500 000 births were attended by midwives, in many cases ignorant; and yet this Bill provided at a reduced fee for the registration of those now practising, even if ignorant. Registration does not mean education. Then this Bill does not make any provision for the education of the candidates. In this country there is not sufficient hospital accommodation for the purpose. As a compromise, he advised a Bill for the registration of midwifery nurses.

Dr BUIST (Dundee) viewed the Bill with favour, and stated that this was the general opinion of the profession in Dundee. A large part of the population was poor and unable to pay the fee of a medical man, and the alternative was that the medical man should work for 10*s.* 6*d.* or have the case attended by a midwife. His experience was to trust the midwives if supervised. He gave instances where he had been sent for in complications and found the previous treatment satisfactory. At present the midwives were under no control at all, whereas if registered they could be made liable for malpraxis and their sphere of practice limited. He had known one to give quinine, another to give opium pills to a patient with albuminuria, and another to prescribe ergot during pregnancy. If such women had been registered their certificates could have been dealt with. The question of midwives was entirely one of cost, affecting those people who were too poor to pay for medical attendance. Matters could be left as at present, or these might be dealt with by the Poor-law, but the feeling associated with this was against it. Another suggestion was a municipal or dispensary system, the

latter supplying the need in Edinburgh. Another plan was the insurance system, but these people do not at present even insure against sickness; or, lastly, cheap midwifery fees. The aim should be to protect the poor.

Dr. CONNEL (Peebles) preferred registered qualified nurses to registered midwives. Thirty years ago the usual practice in his district was to send for some woman; now they send for a medical man, but they do not all pay. Medical education has now permeated the general public, and accordingly they trust medical practitioners and see that the uneducated person is not to be trusted. To register these uneducated women would be a retrograde step; if they were only to attend natural labour, who was to define it? Perhaps the State should take care that the woman was insured against labour—this was surely a matter of public health.

Dr. MACVIE (Berwickshire) stated that midwives were unknown in his district. He considered it was all a question of cost. If a man could not pay the rent of a good house, should a Bill be brought in to allow him to occupy an unhealthy dwelling? All improvement of medical education was for the benefit of the public, and education was becoming more costly. The difficulty of the position was really the matter of poverty, and to make provision for the improvident; the provident get the medical man.

Other speakers agreed that if there was registration there should be some medical qualification and education for it. One stated that he had always found trained nurses acting satisfactorily in conjunction with medical men, and that a country practitioner's life would be intolerable if there were no midwives.

Professor SIMPSON felt strongly that the creation of this special group of women as advanced was a dangerous experiment. The worst feature was that women imperfectly educated were put in charge of a case that required the training of a full medical curriculum. The training given to women at the Maternity Hospital extending over three months was useful and satisfactory. These might be registered.

Sir WILLIAM TURNER stated that from his position as chairman of the committee appointed by the General Medical Council to inquire into this Bill, he had found it necessary to consider this subject. The amended Bill, of which he had only received a copy at this meeting, was very different from the Bill that was under the consideration of the Council. The definition of midwife was entirely dropped out. This definition was a limitation—to limit its scope to women who attended natural labour without a medical man. The amended Bill allowed women to attend all cases, natural or unnatural. The objection to the term "midwifery nurse" was that it placed the woman on the same status as medical or surgical nurses. The latter only acted under the direction of a medical practitioner, whereas the midwife is to attend cases by herself and take an initiative in these matters; and thus there would be a new definition for the term nurse. There were other alterations in the amended Bill; the suggestions of the General Medical Council had not been incorporated by the Government. One thing should be prevented, and that was to allow this register to become loaded with women inefficiently qualified. The Council had had experience of this trouble in the registration of dentists, some of whom seemed to be placed on the register whose sole claim was that on one occasion they may have drawn a tooth. Any woman could be put on this register, but the Council recommended that they should present certificates from a person of authority in the district. This had been ignored, and action should be taken in this matter. He drew attention to the constitution of the Midwives Board; as amended, three other persons were added. It was composed of fifteen members, and one at least must be a woman. The Incorporated Midwives' Institute was to be represented—and what was it? He found it to consist of a body of philanthropic ladies, who had applied to the Board of Trade and received a charter, so that they had now a certain legal status. They were excellent ladies, but what special claim had they to form part of a board composed of representative physicians &c.? In Scotland the Bill did not seem to be required; in England a great want was met by it. There was a great amount of malpraxis; the people needed midwives, but surely these women should be educated. He must support any measure to register women who were properly qualified, and that was by proper education. The General Medical Council inserted words to show that the women should have a proper training; they could not be examined unless they had a previous education, and in England provision must be made for their education. The General Medical Council does not countenance any examination which does not show proper and *bonâ fide* education. Examination must precede registration; but the registration must apply to the new woman, not the old midwife. After the passing of the Act the Council would insist on the women having a knowledge of midwifery. The main difficulty was because the limitation was left out of the amended Bill, and it also contained some minor objections.

Dr. BATTY TUKE considered that registration was not required in Scotland. They had now to face an entirely new position since the definition had been left out of the Bill. A midwife would now become a fully qualified practitioner. The Bill should be resisted as far as possible in the absence of the definition of the term "midwife."

Dr. NORMAN WALKER stated that this proposal would only affect the poor, and was entirely due to the expense of attendance. Newcastle had solved the difficulty by its system of dispensaries with a staff of medical men and midwifery nurses, who called in the medical attendant if necessary. Abroad registration of midwives was in force. He gave the experience of two German medical men. One had been called to a patient and found that the midwife had injected pure carbolic acid into the vagina; he was bound to report this to the authority, and it resulted in the loss of his practice. Another medical man in Hamburg found he was succeeding for two years, but in one month all his midwifery practice disappeared. On investigating he discovered the fact that new practitioners had come who were giving a percentage to the midwives for all cases sent them. In a certain district of England it was known that the medical men paid commission to the midwives when sent for to their cases. He hoped that if any Bill passed a thorough system of education would be demanded, and that the midwives would act under the supervision of some medical man.

Mr. THATCHER, from his experience as a teacher of nurses for twenty years, considered midwives absolutely essential in Scotland for populous and large colliery districts. To have properly qualified midwives is a protection to women in their confinement. He considered a three months' course rather short, it could be made longer with advantage.

Dr. BARBOUR, in referring to the practical conclusion of the discussion, remarked that in Scotland there was not any great need at present for this Bill, but that it should be watched very closely, as if it were passed for England it would soon be extended to Scotland. In doing so attention should be given specially to the definition of midwife, to the provision for their education, and to the composition of the Midwives Board, where it was absurd that members of the Institute should be placed on the same level as the representatives of the Royal Colleges of Physicians and Surgeons.

After the discussion a large number of Fellows and friends dined together in the Waterloo Hotel. The occasion was a special one, Professor Simpson being made the guest of the evening as the twenty-fifth anniversary of his appointment to the Chair of Midwifery had occurred a few days previously. Dr. Barbour presided. Dr. James Ritchie proposed the toast of the guest of the evening, which was enthusiastically received by the company. Professor Simpson, in reply, gave some pleasant reminiscences of his early professional life and his association with Sir James Simpson, and made special reference to his different assistants. The toast of the University was appropriately replied to by Sir Wm. Turner.

PRESENTATIONS.—Dr. Samuel Grose, of Westbourne, Melksham, Wilts, on the occasion of his leaving that town, where he had been in practice for twenty-two years and upwards, has been presented with a handsome silver-clasped wallet and a purse of money, on which is inscribed: "This purse, with 50 guineas, was presented to S. Grose, Esq., M.D., by friends and patients on his departure from Melksham."—Mr. Alexander Gordon, L.R.C.P. Irel., L.R.C.S. Edin., of Rathmines-road, Dublin, has been the recipient of an illuminated address and a gold medallion, highly embellished and bearing a suitable inscription, from the president, committee, and members of the Dublin Hebrew Society for Visiting the Sick, in recognition of the services he has rendered for many years to the members as medical officer to the society.—Dr. George W. H. Tawse, house surgeon to the Whitehaven Infirmary, has been presented by the members of the Whitehaven Police St. John Ambulance Class, to whom he has given a course of lectures on "first aid," with a handsome dressing-case and meerschaum cigar-holder.

Reviews and Notices of Books.

The Value of Electrical Treatment. By JULIUS ALTHAUS, M.D., M.R.C.P., M.R.I., Consulting Physician to the Hospital for Epilepsy and Paralysis, Regent's-park. London: Longmans & Co. 1895.

THOSE who remember the third edition (1873) of Dr. Althaus' work on Medical Electricity may possibly be disappointed in the present volume. How far there are grounds for such disappointment is not quite easy to determine. Compared with its predecessor this book must be judged rather by its more limited scope than by its less imposing dimensions. "Having been in intimate touch with the subject through a long professional life," the author now submits "once more" his "views on the uses and limits of usefulness of electricity in medicine." He deals with the three currents ordinarily used in the treatment of disease, giving special attention to the constant galvanic current, which he considers "by far the most important form of electricity for medical purposes" (p. 4). The views and methods advocated by the author in former works have in some instances undergone modification, and there is the important addition that, with improvements in electrical measurement, current strength (intensity) can now be accurately stated in milliampères. Density, an important factor in dosage, is also in most instances definitely expressed by giving the superficial area of the electrodes used. Would it not be desirable to adopt throughout the method originally suggested by C. W. Muller, and explained in this book, of giving this information in the form of a fraction where the numerator is the strength of the current in milliampères and the denominator the number of square centimetres of surface of the electrode? Thus $\frac{10}{30}$ would express the fact, not only that the intensity of the current is ten milliampères, but that its density is one-third of a milliampère to the square centimetre of electrode surface. Regarded as an exposition of the individual views of the author on the question of electrical treatment, this volume of 100 pages has a distinct interest and a unique value. Were it to be regarded as an attempt to bring the work of 1873 into line with present science it could not be pronounced a success. It is true that a few pages are devoted to a consideration of ohms and volts, and ampères and coulombs, with a short description of the faradimeter and plates of Lewandowski's rheostat and Edelmann's galvanometer; but contemporary and recent work, notably that of the French and American schools, is almost completely ignored. Thus D'Arsonval's investigations as to the effects on nutrition of different forms of electrical energy—including sinusoidal currents, as well as currents of great frequency and high potential—are not even alluded to. Apostoli's treatment of uterine fibroids is dismissed with the remark that space is too limited to consider it. "Metallic electrolysis" is not mentioned; nor is the opportunity taken of formally withdrawing the opinion expressed in the volume of 1873 that the idea "that electricity may serve to introduce drugs into the system is untenable" (p. 708). For the latter sentence something like the following might now have been substituted: "The transference of drugs through the uninjured skin by means of the directional influence of the constant current has been experimentally demonstrated by physicists and is now a recognised practice in medicine." The suggestion (p. 708) that Fabré-Palaprat's proposition was due to "ecstatic spasms" might at the same time have been gracefully withdrawn, and this is scarcely atoned for by the slight reference to cataphoric medication at p. 63 of the present book. The author might also have availed himself of this opportunity to modify the commencing sentence of the former work, which is this: "In the present state of physical science it is generally admitted that all substances contain a very subtle and imponderable fluid called natural electricity ....." For this it would have been fairly correct now to write as follows: "In the present state of physical science few things are more certain than that electricity is not a fluid." Such points are adverted to simply to warn the reader that he must not expect in the present volume an "up-to-date" book covering the whole ground of medical electricity, such as was Dr. Althaus' work of 1873. Passing from what the book is *not* to what it is, the author believes that "Pflüger's researches on electrotonus supply the key to the large majority of the therapeutic applications of the constant current" (p. 18). Thus the anode will prove curative in suitable cases of hyperæsthesia, neuralgia, tinnitus aurium, muscular spasms, contractions, &c. The cathode will "find its appropriate sphere of action where excitability of a nerve or neurone requires to be increased, that is in paralysis and anæsthesia." The existence of electrotonic modifications of excitability under the influence of electric currents is of course beyond doubt. But, admitting this, and even admitting that neuralgic pain points to an increase of excitability, and paralysis to a diminution thereof, there still remain the old and destructive arguments against accepting the electrotonic theory as a basis of electrotherapeutics. These cannot be entered into here. Judged by the rules of procedure laid down in this book, the induction of anelectrotonus and catelectrotonus would seem to be as easy and as certain as to induce contraction in the long flexors of the fingers. Thus regarding, as Dr. Althaus does, shaking palsy as a "neurosis of the Rolandic convolutions, and as the symptoms are more those of debility than of irritation" (p. 44), the procedure at once becomes obvious—simply to induce catelectrotonus "in the motor portions of the cortex," and for this purpose the use of one milliampère of current through an anode of 130 square centimetres seems to be recommended—i.e., a current density of $\frac{1}{130}$ of a milliampère to the square centimetre. It seems almost time to enter a protest against the retention of the term "catalytic action." That uniform direct current known as the galvanic may be stated to have certain physical and physiological properties. These can be discussed each under its own name—as proved, probable, possible, or impossible; none of them need be lumped together under a term whose only claim to usefulness seems to be that it has no definite meaning of its own. Turning to the consideration of faradaism, its stimulating or excitant effects only are mentioned. Reference might have been expected to the well-established sedative and "numbing" effect of the fine wire coil. In discussing Franklinism (p. 4) it would almost appear that there exists in the author's mind some confusion between ordinary disruptive discharge (sparks) and Morton's "static induced currents." It is the former that Dr. W. J. Morton of New York recommends in the treatment of locomotor ataxy but it is the latter (obtained by adding condensers to the static machine and other special disposition of the apparatus) that Dr. Morton first described, and with which his name ought therefore to be associated. Amongst the diseases dealt with is "spinal debility," and the author considers that "many persons, especially young women," suffer from it. Here electrical dosage is not entered into with the author's usual exactitude, but it is satisfactory to learn that the "constant current applied to the spine, both horizontally and longitudinally, had an excellent effect." Another of the diseases considered (p. 33) is "failure of brain power," which "may be defined as paresis or want of action, and as undue excitability or over-action of the different functions of the brain" (p. 34). This condition, the author states, "is often called neurasthenia." Possibly some readers will still prefer to regard both one and the other of these terms as "question-begging epithets," and to adopt the word "neurasthenia" merely as a term signifying a clinical entity of a pathogenic origin as yet unproved,

but displaying itself by certain well-marked preponderating symptoms or "stigmata." The cerebral condition here described as "failure of brain power" is one of those stigmata. One very striking and instructive feature of the book is the comparatively feeble strength of current recommended. For the brain ½ to 2 milliampères with an effective electrode of 16 to 130 square centimetres, and for the spine 2 to 10 milliampères with an electrode surface of 40 to 130 square centimetres, give a fair idea of the intensities and densities used. There will be many who differ from this, but those who clamour for a treatment more heroic must do so with eyes open to the formidable power of the energy they employ, and never forgetting the old Hippocratean precept, 'Imprimis non nocere."

Dictionary of National Biography. Edited by SIDNEY LEE. Vol. XLIII. Owens — Passelewe. London: Smith, Elder, and Co. 1895

THE proportion of medical biographies in this volume is relatively considerable, including those of three presidents of the Royal College of Physicians of London and one president of the Royal College of Surgeons of England. Sir William Paddy was born in London in 1554, graduated as M.D. at Leyden in 1589, and became a Fellow of the Royal College of Physicians of London in 1591. He was elected a Censor in 1595 and 1597, and was four times President—in 1609, 1610, 1611, and 1618. Having been appointed physician to James I. soon after that monarch's accession, he was knighted in 1603, and was in attendance during the King's last illness in 1625. Sir William died in 1634; his tomb is in St. John's College, Oxford. Another Court physician contemporary with the preceding was Richard Palmer, who was elected a Fellow of the Royal College of Physicians of London in 1597; he was nine times Censor between 1599 and 1619, and was President in 1620. He also possessed the degree of M.D., but the name of the university is not recorded; he died in 1625. Dr. Palmer was one of the physicians who attended Prince Henry, eldest son of James I., during his fatal illness in 1612. John Ayrton Paris was born at Cambridge in 1785, studied medicine there and in Edinburgh, and graduated as M.D. Cantab. in 1813. He was elected a Fellow of the Royal College of Physicians of London in 1814, and from 1819 to 1826 lectured there on Materia Medica. He was also Censor for several years, Harveian orator in 1843, and President for twelve years, commencing from 1844. He died in 1856. He had a large practice, and his published works passed through many editions; the principal of them are his "Pharmacologia," "Medical Jurisprudence," "Treatise on Diet," and "Life of Sir Humphrey Davy." Richard Partridge was born in 1805 at Ross, in Herefordshire, studied medicine in Birmingham and at St. Bartholomew's Hospital, and qualified as M.R.C.S. in 1827. On the foundation of the medical faculty in King's College, London, in 1831, he was appointed the first demonstrator of anatomy, and held the position till he became, in 1836, Professor of Descriptive and Surgical Anatomy. In 1837 he was elected a Fellow of the Royal Society, and in 1840 he was appointed surgeon to King's College Hospital, then newly established, and retained this office till 1870. He was made a Fellow of the Royal College of Surgeons of England when the Fellowship was instituted by the Charter of 1843, and was elected Hunterian orator in 1865 and President in 1866. Although a good lecturer and skilled in drawing, he published nothing beyond contributions to the "Cyclopædia of Anatomy and Physiology" and to the Transactions of various societies. A far more distinguished representative of medical science than any of those just mentioned was Edmund Alexander Parkes, who was born in 1819, studied medicine at University College, and graduated as M.B. of London University in 1841. From 1842 to 1845 he served as a military surgeon in Madras and Moulmein, retired from the army in 1845, graduated M.D. at the University of London in 1846, and in 1847 published a work "On Asiatic and Algide Cholera," which was chiefly written in India, where he had witnessed two epidemics. In 1849 he was elected Professor of Clinical Medicine at University College and Physician to University College Hospital. During the Crimean War the hospital accommodation at Scutari was found to be insufficient, and the Government having resolved to provide an additional civilian hospital, Parkes was sent to Turkey to select a site for the building and to undertake the organisation and general management, duties which occupied him till 1856, when hostilities terminated. In 1860 an Army Medical School was established at Fort Pitt, Chatham, and Parkes accepted the chair of hygiene, thereby bringing to a close his connexion with University College. In 1863 the school was transferred to the Royal Victoria Hospital, Netley, and in the following year he published his celebrated "Manual of Practical Hygiene." Several other works were written by him, as well as numerous important contributions to periodical literature. He was elected F.R.S. in 1861. He died in 1876, leaving an imperishable name as the principal founder of the science of modern hygiene and furnishing a remarkable object lesson of the ingratitude of Governments, for his transcendent merits were almost entirely ignored. Thomas Heazle Parke was born in county Roscommon in 1857, studied medicine in Dublin, qualified there in 1878, and entered the medical department of the army in 1881. Next year he saw service in the Egyptian campaign, and subsequently took part in the expedition sent to rescue General Gordon. In February, 1887, he accompanied, as a volunteer, the expedition into the Congo forest organised by Mr. H. M. Stanley for the relief of the German traveller, Emin Pasha. Emin could not be persuaded to leave Africa; but the expedition was otherwise completely successful, and Parke returned to England in May, 1890. He was heartily welcomed by the medical profession there, and the biographer does not omit to mention his enthusiastic reception at the office of THE LANCET. Mr. Stanley freely acknowledged how invaluable was the aid rendered by Parke to the expedition. His military service was now resumed with the 2nd Lifeguards and at Netley Hospital; but his health was permanently injured, and he died in 1893. Of the other medical biographies included in this volume, the most notable is that of Sir George Edward Paget, Regius Professor of Physic at the University of Cambridge from 1872 to 1892. Denis Papin was born at Blois in 1647, and studied medicine at the University of Angers, taking his degree in 1669. He devoted himself to natural philosophy and mechanics, came to London in 1675, and was elected Fellow of the Royal Society in 1680. His principal invention was the digester, an apparatus for boiling food under pressure, which was shown to the Royal Society in 1679, and which is in use at this day.

Thomas Parr—known as "Old Parr"—who died in 1635 at the alleged age of 152 years, was not equal in longevity to his contemporary, Henry Jenkins, a Yorkshireman, who is said to have seen 169 years. These, however, were pre-registration days, and verification of the date of birth was not easy in the case of centenarians in humble life. The opening memoir of the volume is that of John Owens, founder of Owens College, Manchester; the longest, extending over almost twenty pages, is that of Charles Stewart Parnell, the Irish political leader.

St. Bartholomew's Hospital Reports. Edited by SAMUEL WEST, M.D., and W. J. WALSHAM, F.R.C.S. Vol. XXX. London: Smith, Elder and Co. 1894.

THE contributions from members of the staff and others, which occupy the first part of the contents of the volume

chiefly consist of notes on cases which have been under treatment in the wards or out-patient department of the hospital, rather than of contributions of higher importance, but some of them are of unusual interest. Dr. Samuel Gee contributes a case of Aneurysm of the Ascending Part of the Arch of the Aorta, taking the Natural Position of the Heart. Dr. W. P. Herringham writes on the somewhat rare disease Primary Cancer of the Pancreas, and gives an abstract of seventeen cases which had been under observation at the hospital; he also analyses forty others collected from various sources. Dr. A. E. Garrod contributes a paper on the Association of Cardiac Malformations with other Congenital Defects. Dr. Lauder Brunton gives a note on Hydroxylamine Hydrochlorate as a Substitute for Nitrite of Amyl or Nitro-glycerine. Dr. H. Lewis Jones writes on the Treatment of Nævus by Electrolysis. Amongst the surgical contributions the most remarkable is the account of a case by Mr. Thomas Smith in which the superficial femoral, the deep femoral, and the popliteal arteries, with their corresponding veins, were tied in the course of an operation without damage to the vitality of the limb. Mr. H. T. Butlin gives an account of his experience of a Second Year's Surgery at St. Bartholomew's Hospital, chiefly with regard to the treatment of wounds by an antiseptic method. The results are better than they were during the previous year, but do not attain the high standard expected at the present day; for instance, in operations for varicose veins suppuration occurred in one out of five cases; for radical cure of hernia in nine out of twenty-seven; and in amputations of the breast in two out of fifteen. Mr. Walsham writes on Purulent Catarrh of the Accessory Nasal Sinuses. Other contributions are as follows: Mr. Richard Gill, Notes on Chloroform Anæsthesia; Dr. C. Hubert Roberts, the History and Present Position of Symphysiotomy; Mr. E. Percy Paton, a Case of Peri-cæcal Suppuration followed by interesting Cerebral Symptoms; Mr. R. Cozens Bailey, the Treatment of Senile Gangrene; Mr. W. McAdam Eccles, the Great Omentum, Notes on its Development &c.; Mr. E. Willett, a Case of Lymphangioma of the Skin; the Rev. G. Henslow, the Dietetic Value of Food-stuffs prepared by Plants; Dr. H. M. Bowman, a Case of Congenital Absence of both Pectoral Muscles; Mr. J. J. Macan, the History of Diphtheritic Paralysis; Dr. J. A. Hayward, the Diagnosis of Diphtheria; Dr. James Adams, Diphtheria, Immunity of Puerperal Women from its Infection; Diagnostic Value of the Patellar Reflex; Dr. Harry Campbell on the Gradations of Health and Disease; Mr. Thomas J. Horder, the Life and Works of Percivall Pott, being the Wix Prize Essay for the year 1894; Dr. W. J. Horne, Notes on a Case of Fugitive Œdema of Obscure Origin ending fatally; Dr. G. C. Garratt, a Case of General Tuberculosis, with Cortical Tubercular Meningitis producing Localising Cerebral Symptoms; Mr. D. H. Goodsall, Three Cases of Right Iliac Colotomy for Intestinal Obstruction; Dr. S. West, Blood Casts in Phthisis; and Mr. C. A. Morton, a Case of Aural Pyæmia (fatal).

The second part of the book contains: (1) an account of the proceedings of the Abernethian Society for the Session 1893–94; and (2) a list of the specimens added to the museum during the year ending Sept. 30th, 1894, described by Mr. Edgar Willett, amongst which there are many of considerable interest and rarity.

The third part really contains the Hospital Reports—the statistical tables of the patients under treatment in the wards during 1893 by the medical registrars, Drs. Ormerod and Herringham, and the surgical registrar, Mr. James Berry. The medical cases under treatment during the year were 2515, and of these 511 died. The surgical cases were 3986 cured or relieved, and 233 died. Whilst members of the profession will be fully appreciative of the appendices to the surgical tables, in which some of the most interesting cases are summarised, they would be thankful, we think, if sufficient information was given in them to make the abstract of them available for useful reference.

LIBRARY TABLE.

Hygiene, with Anatomy and Physiology. By JOSEPH F. EDWARDS, A.M., M.D., Fellow of the College of Physicians of Philadelphia. New York: Edward P. Slevin. 1895.—The author states expressly (p. 19) that this book is not written for "medical students," and on the title-page it is described as being intended for schools and for general reading. The style is often colloquial and the various arguments are sometimes illustrated by far-fetched comparisons and sensational engravings. For instance, the evils attendant on the escape of sewer air from faulty drain-pipes in the basement of a house are represented by large serpents issuing from the crevices of the pipes and thrusting their formidable heads into the sitting-rooms and bedrooms. A strict observance of the laws of health is what the author seeks to inculcate, mainly through the medium of quaint analogies. Some of these may not be very appropriate, but all the practical recommendations as to personal hygiene are excellent.

The Theory of Physical Education in Elementary Schools. By THOMAS CHESTERTON, Organising Teacher of Physical Education to the London School Board. London and Aldershot: Gale and Polden, Limited. 1895.—About four years ago the author of the present volume published a "Manual of Drill and Physical Exercises," which has passed through several editions, and he now enters on fresh ground with a treatise on the theory of the subject, intended mainly for the use of teachers in elementary schools. Its principal object, in fact, is to prepare candidates for the examinations held by the London School Board and other educational bodies in order to test the proficiency of school teachers in the theory of physical education. The first eighty pages contain an outline of human anatomy and physiology sufficiently full and accurate except that on p 71 "the highest temperature of the body" is given as 40°C., without any mention of the co-existing ill-health. The remaining sections are on the utility of dumb-bells and music as adjuncts in the physical training of children, on the distinction between games and formal exercises, on spinal curvature, &c. Mr. Charles Roberts, F.R.C.S., contributes a few pages on singing and declaiming as physical exercises, and numerous examination papers are subjoined. The book is well adapted to the end in view.

The Phonographic Record of Clinical Teaching and Medical Science. London: Sir I. Pitman and Sons.—The June issue of this excellently lithographed magazine contains a clinical lecture by Professor T. Grainger Stewart on a Case of Renal Disease, and a paper on Neurasthenic Asthenopia by Mr. Edward Nettleship. A short note from the clinic of Dr. Judson Bury on Functional Aphasia is reported by Mr. Leonard Sessions, and Dr. W. R. Gowers contributes an interesting and important paper on Problems in Practical Diagnosis. The July number, which is a double one, contains several papers of interest to both student and practitioner. Dr. Gowers continues his Problems in Practical Diagnosis.

The Treatment and Education of Mentally Feeble Children. By FLETCHER BEACH, M.B.Lond.—In a small book of thirty-two pages Dr. Fletcher Beach summarises his observations resulting from twenty years' experience in the treatment of cases of mental deficiency. He speaks, of course, of the importance of treating defects in the bodily condition before undertaking the moral and intellectual training. The bodily and mental deficiencies commonly met with in such cases are shortly enumerated, and treatment is considered under the following heads: (1) Attention to Hygienic Conditions; (2) Adaptation of the Principles of Medicine to the Infirmities which exist in this class of Patients;

(3) Improvement of the Physical Defects and Imperfections; and (4) Education and Training of the Moral and Intellectual Faculties. Under the second head the treatment of microcephaly by craniectomy is adversely commented on, the author agreeing with Dr. Bourneville's opinion in this matter. Reference is, of course, made to the successful treatment of cretins by thyroid extract. The book closes with a few remarks on the importance of the early commencement of training in such cases.

New Inventions.

THE THERMO-ETHER INHALER.

DR. CARTER of Weymouth has devised an ether inhaler made for him by Messrs. Krohne and Sesemann, of which figures are appended. It is constructed upon the same principle as Junker's inhaler for giving chloroform. It consists of two main parts—a water jacket with receptacle for a Japanese tinder cylinder, and a bottle like the Junker bottle, but graduated to hold two ounces of ether. As seen in the illustration, the water-jacket is suspended in front of the anæsthetist by a strap passing over the shoulder, and the ether bottle, placed in position, is about three-fourths of its circumference surrounded by the water-jacket, sufficient space being left for reading its graduation. About two or three ounces of warm water at about 100° F. are put into the jacket. This will be sufficient for one case, but if there are

FIG. 1.

Inhaler without the bag attached.

several the temperature of the water may be maintained or increased by regulating the current of air passing over the lighted Japanese tinder in the cylinder, and thus causing a slower or more rapid smouldering of the charge. One charge lasts one or two hours. The air is pumped by means of the hand bellows through the ether, and when the patient requires a deeper anæsthesia than can be so obtained the "bag accessory" shown in the woodcut is placed in position. This is taken off and replaced as occasion requires.

FIG. 2.

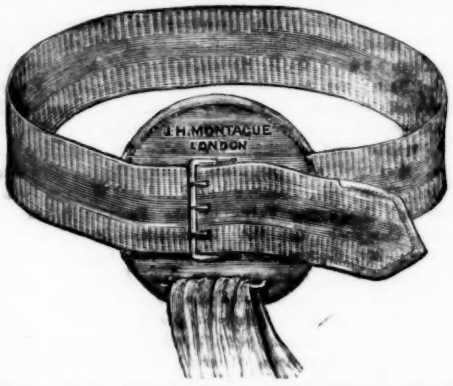
Inhaler showing bag attached.

The advantages claimed for it are: 1. It produces little, if any, asphyxia; it is pleasanter for the patient both at the time of inhalation and subsequently; a cyanotic condition is rarely observed, its absence being due to pumping air through the slightly warmed ether. 2. The complete control over the ether it affords. 3. The ether is in view all the time and does not get contaminated with the products of exhalation; the residue of ether is little, if at all, altered from its original state, an advantage in cleanliness. 4. With management the ether can be kept at an equable temperature. 5. It reduces the equipment of the general anæsthetist—that is, if he uses Junker's inhaler for chloroform,—for pretty nearly the same apparatus does for both, with the addition of a Clover's bag, and substituting the thermo-ether bottle for the smaller chloroform bottle.

Eighteen cases, of which full notes were taken, in which the thermo-ether inhaler was used give the following results: The patients were all females aged from seventeen to sixty-two; all were in good condition save three, one of whom was "delicate," one had a feeble intermitting heart, and one was cachectic-looking, with a "weak heart." The average time of going under with this inhaler and Salomon's purest ether was 4·8 minutes. The operations were from 8 to 38 minutes' duration. Cyanosis only appeared once and the after-effects were few and trifling. There was a total absence of laryngeal irritation and coughing and perspiration. Dr. Carter is able to speak in favour of this inhaler, which, although producing anæsthesia more tardily than is usual, yet completely does away with the undesirable asphyxial symptoms which appear when some methods of giving ether are adopted.

POST-PARTUM UTERINE COMPRESS.

MR. O. T. SLATTER of Green-lanes, N., has submitted to us a useful addition to the gynæcological bag in the form of a pad invented by him and named "post-partum uterine compress," which is made by Mr. J. H. Montague of 101, New Bond-street, W. It consists of a concavo-convex round piece of metal six inches in diameter, padded and covered with white kid, which is kept in position by an abdominal belt made of webbing three inches broad connected to and buckling over it. The bar at its lower edge gives attachment to the sanitary towel or diaper, through a loop of which the belt is threaded posteriorly, the one thus



assisting to keep the other in place. The inventor claims for it these advantages: that after delivery it forms a firm and equable pressure (the amount of which can be regulated to a nicety), and is to be applied subsequently to manipulation and expression of the uterus in cases of imperfect contraction due to an atonic condition of its muscular walls, and in dilatation and flaccidity often met with in women of a neurotic temperament; that it is rapidly and most easily adjusted, no movement of the patient being required, retains its position, and enables the accoucheur to leave earlier and with a greater feeling of confidence, knowing that he has done all that is possible by way of prevention of post-partum hæmorrhage so far as pressure is concerned, which cannot be claimed for the old time-honoured ordinary binder, always difficult and often tiring to the female to adjust with any degree of accuracy, and equally useless on account of the impossibility of obtaining dependable pressure on the one part where only it is of any advantage. Lastly, Mr. Slatter does not represent it to be an instrument for compression only or to be applied to a non-contracted uterus, but to prevent redilatation of the organ after contraction.

THE LANCET.

LONDON: SATURDAY, JULY 20, 1895.

WE recently read in the *American Medico-Surgical Bulletin* an instructive article on Specialism by Dr. CHARLES B. MEDING, in which the author does not seek to disguise the possession of uncompromising views. He declares much of present specialism to be empirical, and rather an art than a due combination of art and science. The tendency of all special treatment, he holds, must be to adopt local measures to the absolute exclusion of general considerations in diagnosis or treatment. A man who looks only into the ear cannot see far into the nose. He whose largest operation is the removal of adenoids will scarcely have a proper estimate of the possible urgency of a hæmorrhage, while those who view female life through the vagina will have little respect for the stomach. After explaining the increase of specialism upon purely commercial grounds, Dr. MEDING remarks with much acuteness that "extravagant development leads to decline." It is upon this dictum that we desire to found a few remarks with reference to practice in our own country. The subject of specialism in medicine and surgery is such a well-worn one, and has been so often discussed in these pages, that it may be thought that nothing is left to say; but this is not so, for the position of matters has changed. There can be no doubt that a remarkable alteration in the position of the specialist is coming over London and the larger medical centres, and in our opinion this change will in no long period of time work a remedy of a condition of things in which many right-minded people have seen need for improvement. To use Dr. MEDING'S words, extravagant development is leading to decline. With competition in specialism there will assuredly come an abatement of a certain desire to rush into specialisation that has of late seized upon the younger of our profession. The general idea that would seem to have pervaded the minds of practitioners and even students, that all specialism pays, is disappearing. When it prevailed it was dangerous, for as it is a simple matter for anyone to term himself a specialist upon any of the various orifices of the body he may elect as the one most congenial for his observation, the risk that badly endowed specialists should multiply with micro-organic rapidity could not be overlooked. And that such rash persons existed may be taken as proven by the frequency with which—at least so we are credibly informed—the two questions which follow are asked. Are needless operations performed for fees? Are methods of treatment urged upon patients for commercial rather than pathological reasons?

Now we are, as we should be, the last to go outside our legitimate domain to say anything reflecting on the character and status of members of the profession in whose behalf we ever write; yet we should be wanting to the trust that has been confided to us if we did not utter a word of warning. We know that practically neither abuse exists. Yet these questions have become matters of discussion in the profession, and this being so it is our duty to ask them out loud, furnishing such reply as is in our power. The practice of medicine and surgery is so inadequately rewarded in this country that the temptation to stray from the paths of rectitude is necessarily very great to those whom circumstances have contrived to make especially susceptible of the value of money. Acute competition may lead to sharp practice in medicine as much as in other avocations of a meaner sort and a more commercial nature. This much is admitted. But in spite of the admission we make bold to say that the answer to the two questions we have propounded is, and is emphatically, No. Here and there the medical man, as now and again the lawyer and even the priest, may be found so wanting to his trust as to give advice from the point of view of his own purse rather than of his patient's welfare—to deny this would be to claim for the medical man a universal and resplendent infallibility—but the profession at large is pure of such reproach—absolutely pure. Only one point requires our serious attention, and it is the point which has dictated all our treatment of this necessarily invidious subject. Is the small section of the profession known as specialists equally clean-handed? And, if so, has it always been, or do some of Dr. MEDING'S pungent reflections upon the specialists of his own country recoil upon the specialists on this side of the Atlantic? The answer is contained in the incontrovertible proposition that only those men who have been educated, and have educated themselves by long and laborious work as all-round surgeons or physicians as a preliminary, can take a proper grasp of a special subject. Men may by circumstances and individual bent become specialists, but in fundamental knowledge and initial training their medical learning must be general, if they are to be first-class scientific authorities. A specialist whose learning and work have been of a limited character must perforce be narrow-minded, and will with perfect good faith advise an operation of which a fellow practitioner of wider views would see the danger in its disproportion to the condition; and we may safely assert that any consulting surgeon in large practice in London would be able to confirm the statement that not an inconsiderable portion of his time is spent in the useful work of pointing out the inadvisability of performing the very surgical exploit for the endurance of which the patient has been sent to him. But if this occurs often one unfortunate thing must follow: the reputation of the profession as a whole will suffer with the public. If it be known that the performance of a needless operation has been recommended, even though the motive may have been of the best, the public is not likely to condone the ignorance, or to see in the motive anything but evidence of corruption.

General practitioners have the matter largely in their hands. When one of their patients needs advice they cannot inquire too carefully into the reputation for special work of the proposed consultant before sending their patient to him or sanctioning an operation of any sort. That specialism in this country as in the United States has been over-developed there can be no doubt, but we venture to think that the writing is on the wall, and that the period of decline is at hand, and we are certain that it is in the hands of general practitioners to restore a healthy condition immediately. Special knowledge means

special training and special experience. Granted; but the more general and wide the learning upon which these are founded the more sound must be the claim to special skill. If this fact is properly recognised by the professional advisers of the public the temptation to the younger members of our order to arrogate to themselves the position of peculiar knowledge without the acquisition of sound general learning or the opportunities of first-class practical experience will be gone; the stress of over-acute competition in one or two popular branches of medicine and surgery will be abated; and the grounds for certain reproaches, now justly or unjustly urged, will be removed.

EXCELLENT though the motive may be, the practice of subscribing to every charitable scheme which well-meaning people may bring before the notice of the benevolent is often productive of harm. True charity, like mercy, carries with it a blessing to both the giver and to the receiver; but as mercy must be tempered with justice, so charity must be combined with prudence or it ceases to exercise its double beneficent *rôle*. At this time of the year benevolent people freely respond to the many appeals which are daily made for funds to send the children of our urban poor into the country for a holiday, and so far as this is carried out on right lines no form of charity can be more worthy of support. But these holidays are not always carried out on right lines; thousands of children are constantly taken by van or train for a day's outing to the country or to the seaside under conditions which are contributive neither to health nor to morality. This kind of treat is rightly deprecated by Canon S. A. BARNETT, who has done much for the social uplifting of the East-end, and who has contributed greatly to our knowledge of right methods in raising the status of the poor generally. We cannot do better than quote his own words. These children, he says, "crowd and scramble into the van or train; they scream and shout during the journey; they show by their greed of the best places a complete forgetfulness of their lessons in manners and unselfishness; and at the journey's end make a wild rush to the field or corner of the beach where the contractor has prepared the food he has brought from town. Here they are besieged by vendors of ices, sweets, whips, and whistles; they are hustled on and off donkeys or merry-go-rounds; they are called to listen to niggers and to concerts; they are tempted to penny 'shies' and shows. All this day, under the hot sun, fed on unwholesome food, excited by noise, they keep in the crowd to which they belong to breathe one another's breath. ..... At the day's end the children—weary, irritable, almost drunk with self-indulgence—once more crowd the carriages, and return home to show by noise and uncontrolled shouts that they have had a happy day." This is no exaggerated picture of what daily takes place during the summer holiday season, and as the tendency is to greatly widen the scope of these excursions year by year, nothing but positive harm can result whilst they are carried out under such conditions. The motive which prompts these good people to take poor children away from their squalid surroundings even for a day, and to place them in a healthier and purer atmosphere, is to be highly commended; but, however excellent the object, such outings as those described can only frustrate the result desired, for the children in many instances return home no better than they left, and in some cases, we fear, far worse.

The only remedy, as Canon BARNETT suggests, is to send the children in small parties in charge of a competent person, who should have absolute control over them, but far better would it be if the public, instead of subscribing to these day treats, would liberally support the already existing societies for sending children out of town, not for a day only, but for a fortnight. Of these there are many, and those who are interested in the matter—and all should be—will find a short but interesting account of the work which they do in the current number of the *Leisure Hour*. The well-organised holidays planned by these societies must do an enormous amount of good to the children both physically and morally, for not only is their bodily vitality renewed, but, their whole environment being changed, they are brought into contact with scenes and objects which otherwise they would possibly never see, and their minds receive an education not very dissimilar in effect to that which foreign travel has on those who can take advantage of it. So complete is the change to many of these poor children, so strange the scenes presented to the eyes whose only horizon has hitherto been formed by bricks and mortar against a leaden sky, that the impression produced on their brains is for ever afterwards present, and mothers have been heard to threaten that they shall never be sent for a holiday again, so wearying and incessant is their prattle of the things they have seen and heard. We cannot suggest a more striking contrast than that presented by the arrival home of the children after a fortnight's holiday, with the bloom of health upon their cheeks and full of tales of wonder, with the boisterous, mentally intoxicated, uncontrolled return of a party from the doubtful advantage of a day trip. As has already been said, no form of charity is more worthy of support than that which endeavours to minister to the health of the children of our urban poor, and while we earnestly trust that subscriptions may continue to flow freely in for this noble work, we hope that those who are tempted to subscribe to day treats will at least see that they are organised on a satisfactory basis—satisfactory both to the donors and to the recipients.

To the medical names on the national roll of valour—to the names of Surgeon-General Sir JAMES MOUAT, K.C.B., Surgeon HENRY THOMAS SYLVESTER, Surgeon-General Sir ANTHONY DICKSON HOME, K.C.B., Inspector-General JOSEPH JEE, Surgeon-General WILLIAM GEORGE NICHOLAS MANLEY, C.B., Brigade-Surgeon WILLIAM TEMPLE, Brigade-Surgeon CAMPBELL MELLIS DOUGLAS, Surgeon-Lieutenant-Colonel EDMUND BARON HARTLEY, Surgeon JOHN FREDERICK MCCREA, Brigade-Surgeon JAMES HENRY REYNOLDS, Surgeon-Captain JOHN CRIMMIN, Surgeon-Captain FERDINAND SIMEON LE QUESNE, Surgeon-Major OWEN EDWARD PENNEFATHER LLOYD, and Surgeon-General HERBERT TAYLOR READE, C.B.—must now be added the name of Surgeon-Captain HARRY FREDERICK WHITCHURCH, whose receipt of the Victoria Cross we announce in another column, for reasons tersely yet stirringly recapitulated in the official

gazetting of the honour, and perfectly well-known not only to all our readers but to all the nation. As a journal written for the medical profession, while we are properly anxious to dwell upon all topics by which honour may accrue to the profession, we are necessarily chary of outspoken laudation of any whole class or department of its members; but the enumeration of these names, redolent of the stories of their associated feats of valour, impels us to ask our readers to consider the singularly practical testimony that is thus afforded to the high qualities of our militant brethren.

The Victoria Cross was instituted after the Crimea by a Royal Warrant dated Jan. 29th, 1856, and was designed to be a visible reward for individual acts of bravery performed by officers, commissioned, non-commissioned, warrant, or petty, in the naval and military services, by marines, seamen, and privates. Three years later a further warrant declared that non-military persons who, as volunteers, had borne arms against the mutineers in India, should be considered eligible to receive the decoration. A complete list of those alive who have earned the V.C. shows that 179 persons can wear the justly coveted distinction—179 persons only. We are not intending to give accurate figures or attempting to express in mathematical terms the valour of the medical officer in our services as compared to that of his companion in war by calling attention to the proportionately huge share of Victoria Crosses that have been awarded to the officers of the army medical staff—the data for such accuracy are not forthcoming and the deductions would not be free from error—but we desire to point out broadly what this proportion is, using the figures of the estimates in the current issue of Whitaker's Almanac. At the present moment the standing Army of Great Britain numbers a little under 700,000, this figure includes the army reserve, the militia, the yeomanry, and the volunteers. The estimated total number of officers, seamen, coastguardsmen, and marines available for sea service in our Navy is a little over 80,000. Thus the total number of the men employed in the two services amounts to a little less than three-quarters of a million. If, then, all the Victoria Crosses now held (179) were held by persons still on the effective lists the proportion of decorated to undecorated in the whole army and navy would be roughly 1 to 4000. But 2500 of this three-quarters of a million are the medical officers who hold commissions in the two services. If the 15 Victoria Crosses held by the two medical departments were all held by officers on the effective list—the same supposition that we have made above in relation to the whole army and navy—the proportion of decoraeted to undecorated would be, roughly, 1 to 170.

The figures are in no way vitiated because the proportion should be calculated with reference to all the living servants of the Crown in either service, retired, pensioned, and on half-pay, and not only with reference to the effective lists; for among the retired, the pensioners, and the half-pay soldiers and sailors will be, of course, found a due proportion of medical officers. We do not wish to lay an improper stress upon these figures. We do not desire to take the reward of the Victoria Cross as the sole gauge of valour, and nothing could be further from our object in instituting these comparisons than any foolish idea of exalting our brethren in medicine at the expense of their brethren in arms. Our object has been solely to place before our readers an additional reason why the profession at large should be proud of its members in the services, who, albeit so-called non-combatants, have yet reaped on so many occasions the reward of personal valour in the field. In congratulating Surgeon-Captain HARRY FREDERICK WHITCHURCH upon the just recognition of his splendid and self-sacrificing deed of bravery, we congratulate him also upon being enrolled in a select band of heroes of whom the profession is justly proud—the medical holders of the Victoria Cross. He is a good companion in right good company.

Annotations.

"Ne quid nimis."

THE DUTIES OF MEDICAL SOCIETIES.

IN the account of the meeting of the British Gynæcological Society which was published in THE LANCET of July 6th, it is stated that the first business of the society was to witness three specimens: (1) that from a case of suppurating ovarian tumour with purulent peritonitis and adhesions; (2) fibroma of the uterus removed by enucleation; and (3) total extirpation of the uterus and ovaries for prolapse. With regard to the third case a few remarks are, we think, called for. The surgeon who narrated the case explained that for the prolapse he tried the use of pessaries, and not succeeding therewith he decided to remove the uterus and appendages, the patient being a woman aged thirty. We do not pretend to write as gynæcologists; but we do not for that reason feel it at all less binding on us to say that in our opinion the reasons for this procedure require to be more fully set out than appears to have been done at the society. We note that the president (Dr. Godson), Dr. Routh, and Mr. Taylor of Birmingham criticised the procedure in a tone of disapprobation. Ordinary surgery has become more conservative with its increased powers. The removal of a leg is felt to be an unsatisfactory and opprobrious proceeding, except as a last measure of relief. *A fortiori* any operation involving a much more serious mutilation must be so regarded, and we are of opinion that a society before which such cases are recorded does not discharge its duty without investigating the case by a committee appointed for the purpose, and placing its deliberate judgment on the facts on record. The amount of suffering and disability experienced by the woman, the precautions taken by the surgeon before operating, and the degree to which he shared his responsibility by consultation and by full statement of the facts to the patient are obvious matters for inquiry. We gather that the operator acted with perfect satisfaction to himself in what he did, and doubtless when the full facts are known we shall find with perfect propriety. But for the sake of the reputation of surgery, and especially of gynæcology, we maintain that the facts should be fully investigated and published by the society, which has in a degree incurred responsibility in connexion with the case.

FUNERAL AND BURIAL REFORM.

IT is satisfactory to see from the reports of the Church of England Burial, Funeral, and Mourning Reform Association that efforts are being concentrated on those two points where reform is most needed. Those are the coffin and the grave. In other words, burial is gradually coming to be a

reality and not a sham. It is no longer necessary to attach the scarves, hat-bands, plumes, and palls; these relics of undertaking frippery have almost disappeared, and it is no use slaying the slain or even the moribund. The coffin still requires reforming. In his immortal work, "Vanity Fair," Thackeray observed: "As long as we have a man's body we play our vanities upon it, surrounding it with humbug and ceremonies, laying it in state, and packing it up in gilt nails and velvet." In "The Newcomes" he returns to the subject, and at the funeral of Lady Kew refers to that "bedizened box of corruption" and "yonder velvet-palled box spangled with fantastic heraldry and containing within the aged slough and envelope of a soul gone to render its account." Is there not still a lingering relic of these "vanities" in the strong oak coffin with French polished sides and lid and shining brass furniture? For if the burial is to be a reality, and if the body is to be committed to the ground, the handsome coffin surely becomes an incongruity. This last lingering relic of undertaking monopoly will die very hard; but die it must when its absurdity once becomes patent. Perhaps there is some feeling for the undertaker shorn of all his other profits but this, and some echoing of the question of the elder Mr. Weller, "What would become of the undertakers?" Possibly some persons argue that the providing of handsome coffins gives employment, and therefore bread, to a larger number of persons than if they were of a simpler character. These and all other excuses—reasons they cannot be called—must give way to what is expedient. If burial is to continue as a means of disposal of the dead, it must be, as defined by Lord Stowell, the carrying of the body to its parent earth for dissolution in a decent and inoffensive manner. The use of a readily perishable coffin becomes every day more and more imperative, bodies entombed in vaults and bricked or walled graves being a source of danger to the living as well as a mockery of burial. And the strong coffin, when deposited in the earth, has the disadvantage of retarding the dissolution of the body and defeating the very object for which it is placed in the ground. Wood, whether in the form of oak, elm, or deal, will always be required for the living, and if the provision of a perishable coffin should create a new industry so much the better. Then there is the question of expense. Is it reasonable that the coffin, the very name of which implies "basket" or "wicker," should cost a sum varying from £5 to £20? A coffin sufficient to convey the poor body to the grave could be provided for less, leaving the balance for survivors.

THE GENERAL ELECTION.

"Election, election, and reprobation—
It's all very well, but——."

So sang a great poet, using the words in their theological sense; but they may well serve as a text at the present time when there is a great deal both of election and reprobation on foot throughout the country. Medicine has, or ought to have, no politics. Its sphere of labour is the same whether east or west, and disease attacks every class and creed with absolute impartiality. Still, all medical men must remember that they are citizens as well, that citizenship brings with it responsibility, and that this responsibility must not be shirked. We all have our own private views as to what things are desirable and right, but in a general election there are certain broad issues which touch every man, on which everyone is bound to give his judgment, and which stand out above the flood of petty personal wishes and interests. A word of warning may be said upon political excitement, to which three deaths at least have been set down during the present election. The turmoil and stress of modern life, perhaps, tend to unsettle those whose nervous system is not very strong, and the tendency to over-pressure which has been a feature of national education for the last twenty years or so has no doubt succeeded in producing a generation of nervous, irritable, and mentally ill-balanced men. The average school-board taught voter, from the age of eight to thirteen or so, is crammed with scraps of knowledge most of which are utterly useless to him in after life, and this cramming naturally reacts on a brain ill-nourished, and so lays the foundation for future nerve troubles. The old kind of election, such as those described in "Handy Andy" and "The Newcomes," doubtless presented a variety of undesirable features. The drink, the bribery, and the free fights have all passed and gone; but are matters really in a more healthy state—physiologically, we mean? In an election nowadays attention and excitement are kept perpetually on the stretch by news coming from far and wide. No wonder, then, that when the inevitable reaction arrives its results are shown by increased attendance at hospitals for sleeplessness, headache, and other forms of nerve fatigue. We would counsel, then, our readers, as forming an important part of the body politic, to use their privileges dispassionately, to vote for the side which they think right, and not to be led away by the clamour of rival party newspapers, but also to bear in mind that the Parliamentary vote is not a thing to be thrown lightly into the political cauldron, but one to be used with discretion, and that if the issue is decided by these means it may be said of our country, even as of another long ago, "And the land had rest forty years."

ALPINE MISADVENTURE.

WE have before us the official report of the "Saison Alpinique" in Switzerland for 1894, from which we learn that the deaths by misadventure on the Alps were in all thirty-seven. This total is a little below the yearly average, which, according to the same authority, is forty-one. Of four out of these thirty-seven "accidents" there are no details; but as to the remaining thirty-three, we know that fourteen persons had fallen over precipices; that eight met their deaths on comparatively easy routes; and that six were the victims of their own imprudence, from having ventured on dangerous tracks. Finally, one climber slipped into a crevasse from which his corpse was recovered, two were crushed to death by the descent of avalanches, and two others by the fall of rocks. This, however, by no means exhausts the list of those who have shortened their days by ascending to Alpine elevations. Cases of heart failure, due to "high tension" at "high altitudes," have been frequent enough to evoke a medical warning against the practice, so recklessly indulged in by gouty and atheromatous subjects, of getting "ballooned up" by funicular railways to points at or immediately under the snow-line. Indeed, so common has fatal syncope from this cause become that two years ago a Congress of Swiss physicians met at Arosa to formulate their protest against the multiplication of such means of rapidly conveying passengers in all states of health to elevations at which only the young and sound can respire with ease and safety. Powerless to arrest railway enterprise, the Congress suggested that at the departure and arrival stations of those lines the companies should have medical aid within immediate call, with the appliances and restoratives necessary. Many of the adventurous middle-aged might, before gratifying their ambition to ascend the Jungfrau, for instance, have themselves examined as to their fitness for the ordeal; others, in whom heart failure had declared itself on arriving at their destination, might, by prompt and effective treatment, be rescued in the nick of time. Had such a preliminary examination been practised in the case of Baron Peccoz, whose tragic death in the presence of the Queen o Italy on the Lysjoch last autumn was described in THE

LANCET, he would certainly have had full warning of the fate he was courting. As it turned out, his condition was such that his death should have found its place among those due to syncope, instead of being classed, as it was, in the list of "accidents." The fact suggests considerations of the highest medical interest, such as might well engage the attention of another Congress like that which met at Arosa. How many cases of slipping down crevasses or falling over precipices are not really the result of antecedent heart-failure supervening suddenly in a perilous position? That is the question on the solution of which will depend a system of classification totally different from that adopted in the report of the "Saison Alpinique" for 1894.

AN EXAMPLE TO BE FOLLOWED.

"WHAT Lancashire thinks to-day England thinks to-morrow," is a saying much in evidence at the present moment, and we may hope that this remark will hold good of at least one other matter whatever may be the case as regards party politics, with which we are not concerned in these columns. It had been for many years the custom of the members of the legal and medical profession in Preston to have an annual cricket match, and some three years ago it was decided to combine this match with the social function of a garden party. The event became very popular, and on the occasion of this year's match some 1200 invitations were issued. The expenses are met by the two professions, not merely the players, but by all the practising members, so it is easy to see the good fellowship and *cameraderie* that exist, not only between individual members of each profession, but also between the two bodies in their corporate capacity. We think that the example of Preston might well be followed by other large towns, for any opportunity of inducing professional men to take interest in subjects outside their daily toil is not only a benefit to themselves, but also to those for whom their work is done, inasmuch as by such mental and bodily recreation they are prevented from getting into what a prominent medical man recently called "grooviness." In the single innings match which has recently been decided we notice that the medical men won by 63 runs, the scores being—"Medical," 121; "Legal," 58.

PROPOSED MEMORIAL TO PROFESSOR HUXLEY.

THOUGH we hope shortly to see a national memorial raised worthy of that great man of science who recently passed away from us, yet it is none the less fitting, we think, that the students and friends of the medical school where Huxley commenced his scientific studies should establish among themselves some form of lasting testimony which, if it had no other object in view, may at least be calculated to inspire the future students of Charing-cross Hospital with that excellent spirit of scientific progress and love for the truth and the truth only which was so marked a characteristic of the late Professor Huxley. We are glad to learn that the interest in the proposed memorial is not likely to wane. At the meeting which we announced to take place in our last issue at the Charing-cross Hospital Medical School on the 16th inst. there was a good attendance, and letters expressing inability to attend, but the tenour of which was in sympathy with the movement, were read by Mr. Herbert Waterhouse, the secretary, from the Duke of Saxe-Coburg, Sir Guyer Hunter, Mr. Henry Huxley, Sir James Paget, the Hon. W. F. D. Smith, M.P., Mr. John B. Martin, Sir Savile Crossley, Dr. T. Henry Green, Dr. Mitchell Bruce, and others. Sir Joseph Fayrer, who presided, gave a short but impressive sketch of the friendship which subsisted between himself and Mr. Huxley while students together at Charing-cross Hospital. He claimed to have largely influenced Huxley in the choice of a career. After a warm eulogy of the splendid abilities and personal qualities of the distinguished student of nature Sir Joseph Fayrer moved: "That it is desirable, by means of a suitable memorial in connexion with the Charing-cross Hospital Medical School, to permanently record the fact that the late Professor Huxley received his early scientific and the whole of his medical education at the Charing-cross Hospital School, and thus to keep the example of his life and work constantly before succeeding generations of Charing-cross students." This was duly seconded and carried. In accordance with the terms of a further motion proposed by Mr. Barrett, and seconded by Dr. Watt Black, it is proposed that the memorial shall take the form of a Huxley scholarship and medal, to be awarded annually at Charing-cross Hospital Medical School, and that if funds permit an annual lecture at the Charing-cross Hospital Medical School dealing with recent advances in science and their bearing upon medicine shall be instituted. We learn that subscriptions have already been received which it is hoped may meet the requirements of a scholarship and medal, and the committee trust that funds sufficient to establish the annual lectureship will be forthcoming. The scheme is a worthy one, and we trust that no part of it will languish for want of adequate support.

ENGLAND'S QUARANTINE STATION.

ONE intended piece of legislation has unfortunately to be postponed until next year owing to the sudden dissolution of Parliament. Last year the House of Commons was promised that they should never again have submitted to them in the Estimates the item for maintaining an establishment and staff under the Quarantine Act; and it is no secret that a Bill had been drafted, and was to have been brought in by Sir Walter Foster, in order to settle once for all that England would no longer maintain even a semblance of quarantine, whether for commercial or international purposes. Now the matter must stand over, and in addition to the reproach so often levelled at us of possessing Crown colonies which maintain the system of quarantine in the Mediterranean, we are still open to the retort that the hulks at the Motherbank are a standing proof that, whatever our motive, we have not finally abolished quarantine in this country in connexion with yellow fever. It is to be hoped that at an early date in the Session 1895–96 steps will be taken to remove this blot from our statute-book, and that the fulfilment of the promise made by the last Government will not be delayed.

A GROWING DEMAND FOR LIGHTER WINES.

AN interesting return of statistics, giving, degree by degree, the strength of wines imported into this country during the year 1894, has recently been printed in response to an order of the House of Commons. From the point of view of the evils of alcoholic drinking it is especially interesting, since the figures show pretty conclusively that the demand of the people is steadily increasing for lighter alcoholic beverages, and it is a fact on which we think the nation may well congratulate itself that the supply of wines of a lighter and more wholesome character is sufficiently met as to present no obstacle to this healthy movement. Taking the total wine imported in cask, it will be found that 7,503,044 gallons were imported of a strength not exceeding 30 degrees, while of a strength exceeding 30 degrees, up to 42 degrees, and beyond, 4,596,283 gallons were imported into this country. Spain sends to our shores the largest quantity of wine (3,748,974 gallons), but it is distinctly stronger than the generality of French wines. Thus, the strength of the highest proportion supplied (677,753 gallons) was 28 degrees (11 degrees more than the bulk of French wines). France stands

next in regard to the total quantity imported, but the largest proportion of the importation (855,634 gallons) consisted of wine of 17 degrees strength only, the supply of wine of greater strength than 30 degrees being quite insignificant, till it falls to absolutely *nil* after 38 degrees. Portugal supplies almost as much wine as France, but here again the bulk of it is stronger even than Spanish wines. Thus, the highest figure representing gallons imported occurs in the 35 degrees strength column. Coming to our Australasian colonies, whose supply in regard to quantity stands next, it is again satisfactory to find that the largest number of gallons imported stands at 24 degrees strength. These results will surely convey a crumb of comfort even to our strictly abstemious friends; but if, as M. Daudet is said recently to have stated, the ravages of the phylloxera and the consequent fabrication of alcoholic liquors, which to a large extent replaced the supply of light and wholesome wines, are leading to distinct increase of crime in France, then we may with some justification regard these figures as sure and certain evidence of moral progress.

MODERN MEDICINE AS A SCIENCE.

THE claim of medicine, in some of its departments at least, to take a place among the exact sciences has just been ably vindicated by Dr. Alfred Carter of Birmingham. Writing in the current number of the *Birmingham Medical Review* he adduces several familiar instances in which from given conditions certain phenomena may be confidently predicted. No doubt many branches of medical inquiry are still in the inductive stage, and the laws which operate therein have yet to be worked out, but the same condition of incompleteness exists more or less in every one of the natural sciences. Modern medicine has a rational and scientific basis. This is Dr. Carter's theme, and he justly condemns the narrow utilitarian views according to which a student's hospital work should be devoted solely to the acquisition of so-called practical experience. Considering the multiplicity of intricate subjects with which a student has to gain some acquaintance in the space of five years, it should be his object to grasp general principles and to lay the foundations of a stock of knowledge which more mature experience will enable him subsequently to increase.

MEDICAL EDUCATION IN THE UNITED STATES.

THE efforts of the best men in the profession of the United States to raise the tone and standard of medical education there have often been alluded to in our columns. The case of the United States is singular as that of a settled, well-ordered community of over fifty millions, mostly English speaking, in which there is no central law governing the practice of medicine. Each State does what it pleases, and most of them please to do very little in the way of exacting from medical practitioners any evidence of sufficient or satisfactory education, either general or medical. There is no central endowment of medical schools or universities with which medical schools are connected. Any group of needy or enterprising men may combine in any town or State to create a medical school, and till lately have had no difficulty in getting it recognised after a fashion. In this way it has come to pass that "in this unhappy country," as Artemus Ward would say, there is an unprecedented number of medical schools and of medical practitioners, charlatanism triumphs, and the reputation of the profession suffers. Whereas there is in the Austro-Hungarian Empire 1 physician to 3857 people, and in England and Wales 1 to 1484, in the United States there is 1 to 500. So with medical schools. In the Austro-Hungarian Empire there is one medical school to 5,153,917 of the population; in Great Britain one to 2,358,767 of the population; and in the United States there is one medical college to 440,151. There is no general medical council to supervise all and to see some sort of fair play to all. The results have been disastrous. But the evil is now too faithfully admitted and exposed to be of much longer continuance. The last statement of it and of the attempts to remove it are to be found in an admirable "Plea for Efficient Legislation Regulating Medical Practice," read before the American Academy of Medicine at Baltimore on May 6th, by Perry H. Millard, M.D., of St. Paul, from which we take most of the above figures. The reformers began with requiring a curriculum extending over three years. They now aim at requiring six months' courses in separate years for four years and propose to exact this after 1896. They recognise that legislation is indispensable to secure this, and that it is necessary in the interest of the public and of the medical profession alike. What can be more obvious than the truth of these views? How can men be expected to cultivate medical learning and efficiency if every charlatan is allowed to use medical titles and to enforce medical charges? The anomaly of low medical education in the States is the more remarkable, Dr. Millard shows, as the founders of the United States showed their wisdom in establishing a system of common school education that challenges the admiration of the world. The promoters of sound medical education in the United States deserve all sympathy, and they have it. They must appeal boldly to high public sentiment in their own country for powers to control the number of medical schools, and to secure a good minimum of preliminary and medical education in all who call themselves medical practitioners, and for the body or bodies with such powers of control the power of censuring or degrading those who act unworthily of their high calling.

THE REWARDS AND HONOURS FOR CHITRAL.

No one who has followed the history of the heroic defence of Chitral and of the splendid efforts that were made for the relief of that garrison can deny that all who took part in it deserved well of the country. It adds another and a very brilliant chapter, of which any nation might well feel proud, to the long record of successful and distinguished military services of the British in the East. England has become an empire and has extended her boundaries from sea to sea and land to land by the possession of those qualities—force of will, pluck, and fortitude—which were probably never better exhibited than on this occasion. The forces that took part in the defence and relief of Chitral defied climate and disease, and laboured under a tropical sun or amid snow and icebergs with the same indomitable perseverance, scornful alike of obstacles and difficulties, ready to fight and unconscious of defeat. Their services belong to history, but we are proud to point to the fact that members of the Indian Medical Service were among those who most distinguished themselves. We sincerely congratulate Surgeon-Major George Scott Robertson, C.S.I., of that service, on being made a Knight Commander of the Most Exalted Order of the Star of India, and Surgeon-Captain Harry Frederick Whitchurch, also of the Indian Medical Service, on his having obtained the decoration of the Victoria Cross for his conspicuous bravery during the sortie from Chitral Fort on March 3rd last. The brief history of the circumstances under which Her Majesty has been pleased to confer this much-coveted decoration on Surgeon-Captain Whitchurch can only be read with a glow of pride and a feeling that he has thoroughly earned it. Sir George Scott Robertson, who is attached to the Bengal Medical Department, was appointed surgeon on March 30th,

1878, and subsequently became a surgeon-major. He displayed great courage, ability, and judgment under very trying circumstances throughout the siege of Chitral. We have previously alluded to the splendid services of Colonel Kelly, who, in our opinion, has not been sufficiently rewarded for them. We sincerely congratulate him, however, and all the other officers who played a distinguished part in the operations of the Chitral Expedition on the recognition of the brilliant and important services they rendered. It is presumed that in a subsequent *Gazette* the services of other portions of the Expeditionary Field Force will also be recognised and rewarded.

JACKSONIAN EPILEPSY FROM OLD CEREBRAL ABSCESS.

DR. LEPINE has recorded, in the last number of the *Revue de Médecine*, a curiously interesting case of a woman aged sixty-two who, ten years before her admission to hospital, had had a series of convulsions with loss of consciousness, and these were succeeded by left hemiplegia, which lasted fifteen days. Since then she had had frequent attacks, which had been regarded sometimes as Jacksonian attacks, sometimes as hysterical. In December last she had one day several attacks, and these continued to recur day after day. There was loss of consciousness in the severe ones, but there were also slighter ones in which there were jerkings of the fingers and forearm, but no loss of consciousness. On the day after her admission, following a severe attack, left hemiplegia was noted affecting both arm and leg, but sparing the face. The attacks came on more frequently, and although bromides lessened their severity it did not control them, and the patient gradually sank and died. At the necropsy it was found that in the right frontal lobe, rather nearer to the anterior border of the hemisphere than to the fissure of Rolando, there was a cyst two to three centimetres in diameter with caseous contents. It was, in fact, apparently a cold abscess, and there seems every reason for believing that it must have existed for the ten years during which symptoms, only explicable on the hypothesis of such a lesion, had been present.

TREATMENT OF THE OPIUM HABIT.

IN a recent number of the *Philadelphia Medical News* Dr. M. V. Ball has a short note in reference to the treatment of what practically amounts to a disease by the sudden withdrawal of the opium and the withholding of treatment for the severe symptoms which sometimes follow its removal. He briefly relates the histories of three patients treated in this way. The first was a man aged twenty-six who had been an opium smoker for four years; the second, a man aged thirty-six who had been taking twelve grains of morphine daily for twelve years; and the third, a man aged thirty-one who had used gum opium, laudanum, and morphine for fifteen years, taking about 50 cents' worth in a day. All three had been convicted of crime and were treated in the Eastern Penitentiary. They were carefully searched, all intercourse with the outer world was prohibited, and they were fed on the ordinary prison fare. The sudden deprivation of the drug produced the usual symptoms—severe diarrhœa, vomiting, and insomnia, as well as weakness and irritability. The patients were visited daily and reassured, but no drugs were administered. Within ten days all desire for the drug had ceased, and the symptoms alluded to had passed off. The loss of flesh was soon made up, and they declared themselves as feeling better than ever. Dr. Ball has now treated six cases in this way, and is inclined to think that this mode of treatment by sudden and complete withdrawal of the drug, without any symptomatic or dietetic treatment, is followed by as speedy and satisfactory results as any other course. One curious point which he mentions is that in several cases in which the drug has been gradually withdrawn and the emesis and diarrhœa treated with other medicine the suffering, although not so acute, was prolonged, and the desire for the drug persisted for a much longer time. As Dr. Ball remarks, the treatment here recommended is only possible under conditions in which restraint can be used.

MEDICAL CERTIFICATES FOR THE LONDON BOARD SCHOOLS.

THE following incident took place at the Board meeting on July 18th:—Mr. Athelstan Riley asked the chairman of the school accommodation and attendance committee whether, since the letter received from Captain Blount, R.N., secretary of the Victoria Hospital for Children (stating that, until the resolution passed by the Board on May 30th, 1895, is rescinded, the staff will decline to give certificates to children attending the hospital, though they may think it desirable that the child should be excused from attending school), the following letter had been received from the secretary of the Paddington Green Children's Hospital:—

"10th July, 1895.

"GENTLEMEN,—I am desired by the medical staff of this hospital to inform you that, should the resolution passed by your board on May 30th, 1895 (a copy of which I enclose) be carried into effect, they will decline in future to give medical certificates of unfitness to attend school for children under treatment here."

To the foregoing question Mr. Sharp (chairman of the School Accommodation and Attendance Committee) answered "Yes." There is a simplicity and directness about Mr. Sharp's answer which it would be a pity to spoil by any comment.

THE ORGANISATION OF GENERAL PRACTITIONERS IN GERMANY.

OUR readers will have been much interested in the account given in THE LANCET of last week by our Berlin correspondent of the proceedings at the annual meeting of the German Practitioners' Association. The association, which is purely voluntary in its nature, concerns itself rather with the social interests of the profession than with scientific matters. It would almost seem as if one association, however large, were unfitted to discuss both social and scientific questions. The British Medical Association has never succeeded in organising discussions on questions of general professional interest, affecting general practitioners as it has succeeded in the sections devoted to scientific work. Division of labour applies to associations as it does to individuals. The chief feature of the General Practitioners' Association was the address of the president, Dr. Aub, who pointed out that the Workmen's Insurance Laws, by which every workman is compelled to be a member of a sick club, have materially affected some departments of medical practice. Individual medical men find it hard to compete against the clubs. The association is utilised to treat with the clubs as to terms, treatment of medical officers &c. Surely in this country there is room for the action of a large and powerful defence association for protecting medical men from the unfair dictation of associations of workmen who fail to realise the nature and value of medical service. The one remedy for the crushing and humiliating pressure brought to bear on our own members is the organisation of the profession for dealing with these powerful associations of workmen. One point was much discussed with reference to the number of medical officers that a sick club should have. In a few districts what is known as the "free system" (described in THE LANCET of Feb. 2nd) is in force. According to this plan every practitioner in the district of a club who chooses to do so is allowed to attend the members. After a warm debate a resolution recommending the adoption of the "free

system" throughout the German Empire was adopted. To avoid unjustifiable demands on the part of the club it was strongly advised in the resolution that contracts with it should be made, not by individuals, but by the Association, which has branches all over the country. We commend this association and its proceedings to the attention of the many medical men who are now justly anxious about the interests of the profession. It is only fair to say that the educational and professional efficiency of medical men was insisted on by the President. In this connexion Dr. Aub pointed out the deficiency of the qualifying examinations, especially in respect of mental diseases. This deficiency had been shown in courts of law in Germany to the disparagement of medical witnesses and the discredit of the profession.

A SALVATION ARMY SHELTER AND SMALL-POX.

DURING the last fortnight 13 cases of small-pox have occurred in the district of St. George the Martyr, Southwark, and of these 5 came directly from the Blackfriars Salvation Army Shelter. Several of the cases also occurring in the workhouse sprang directly from the original patient, Benjamin Levi, whose case was reported on June 19th. Besides these cases others have been reported from the districts of St. Giles, Limehouse, and Whitechapel, all occurring in patients who had slept in the shelter during the period of infection. Five cases which had been exposed to infection in this particular shelter were also reported by the Asylums Board. After the reporting of Benjamin Levi's case the medical officer of health (Dr. F. J. Waldo) determined to inspect the shelter, and attempted to do so on the night of June 24th in company with two sanitary inspectors. The party were refused admission, and accordingly a justice's warrant to enter and inspect the premises was obtained on July 6th. Armed with this warrant the party proceeded to the shelter on the morning of July 8th, and were forcibly prevented from entering, but on a threat of bringing up a strong force of police Dr. Waldo was allowed to enter, when, to use his own words, he found "overcrowding of the grossest character along with utterly inadequate ventilation." The St. George's Vestry have passed a resolution to serve a notice on the occupier of the shelter to abate the nuisance. This is as it should be, and we only hope that steps will also be taken to punish those who forcibly resisted the entry of the medical officer. Sanctuary for tramps and valiant beggars used to be the peculiar privilege of the Church, and now that this is in abeyance the right must certainly not be given over to a body which has assimilated the worst excesses of primitive and mediæval mysticism, and which, if allowed to go on its way unchecked, will be a danger to the health of the community.

THE MATERNITY CHARITY AND DISTRICT NURSING HOME, PLAISTOW.

THIS charity dates from 1889, when Sister Katherine, the Lady Superintendent, went to Plaistow and started the institution in coöperation with the parish authorities as one of the charities of the parish of St. Mary's. The work soon extended over eleven parishes. Maternity cases have been nursed for thirty-four medical men, and district cases have been nursed for seventy-four medical men. We are glad to see that the authorities of the charity approve of the poor being attended where practicable by medical men. They properly observe that even among the poorer classes there are many women who can afford to employ a medical man at their confinement, and that such an arrangement is desirable. We agree with this, and regard all midwifery practice not under the care of a medical practitioner with some misgiving; but in such districts as Plaistow it seems that about half the population cannot afford even a half-guinea fee. It is for them that a maternity charity exists. The cases are attended by nurses and midwives; various medical men give their assistance when necessary. There is besides a large amount of district nursing. There were 1088 midwifery cases. Of other cases there were 1540, the whole involving 936 special day attendances and 1095 special night attendances, and a total of 63,478 visits. The poverty of this district has been emphasised in the last winter, and we cannot but think that such charities as the above have a strong claim on the benevolent of all parts of London. They are in considerable debt, and help will be very gladly received by Sister Katherine.

THE LATE PROFESSOR HUXLEY.

THE *Spectator* of the 13th inst. contains a communication illustrative of the kindly sympathy of the late Professor Huxley with the efforts of obscure scientific investigators. It appears that a man of the labouring class devoted his spare time to original research, aided by a sixpenny magnifying glass, and that he had forwarded a paper to Professor Huxley giving a vivid and scientifically accurate description of the multiplication by fission of a lowly organism observed by him in an infusion of his own preparation. It was suggested by a clergyman, of whom Professor Huxley had inquired how he could best help such a man, that the gift of a microscope and a few scientific books would probably be very acceptable in the meantime. These were duly forwarded, and a splendid microscope and some books were handed over to the labouring man as a gift from an unknown hand. The gratified recipient, however, shrewdly guessed the source whence the gift came, with an expression of extreme satisfaction at the generous interest and kindly sympathy it evinced.

QUACK DOCTORS IN INDIA.

MR. R. CARSTAIRS, of the Bengal Civil Service, after an experience of many years as a magistrate in the Mofussil, has produced a remarkably interesting work entitled "Human Nature in Rural India," which is published by Messrs. William Blackwood and Sons. Books treating of Indian topics have become rather numerous of late years, but the writers, for the most part, select some salient point or special characteristic as their theme; whereas in the present instance there is no attempt whatever at striking novelty or attention-compelling originality, the writer contenting himself with the production of a sober-tinted picture wherein the actual life led by the vast majority of the inhabitants of our great dependency is faithfully depicted. The province of Bengal, with which Mr. Carstairs is chiefly concerned, is by far the most densely populated portion of the huge peninsula, but its teeming millions are utterly devoid of all ambition, and have no hopes or desires beyond the petty horizon of their native villages. They seem to be a people of an unalterable type, upon whom climate and food (aided doubtless by unbridled sensuality) have affixed the seal of inertia, depriving them entirely of self-reliance, energy, and capacity for self-government. In common, we imagine, with most people in this country we were under the impression that the shroff or usurer was the principal scourge of the Bengal villager, but according to Mr. Carstairs this much maligned individual is in reality a blessing in disguise, being as a matter of fact far too wise to slay outright the geese that lay him silvern eggs. He charges a high rate of interest, it is true; but where are there money-lenders to be found who will distribute their stock-in-trade for love? And often, if it were not for his timely aid, the peasant would be irretrievably ruined. A far worse friend to the native is the quack doctor,

who of late years has multiplied at an astonishing rate. Formerly the species was unknown save in the larger towns, but nowadays the creature is to be met with everywhere, making money chiefly by the sale of medicine, but also extracting fees whenever he can induce his patients to disburse. Mr. Carstairs characterises the Bengal quack as a "reproach and a hindrance to English medicine," and states that in one village of about two thousand inhabitants with which he is acquainted there are no fewer than sixteen of these irregular practitioners.

THE PROFESSION AND FORCED STATE LABOUR.

ALBERT SMITH in one of his novels describes the opening address at one of the London hospitals, wherein the speaker, a prosperous consultant, pointed out how the future practitioners would receive their reward, not perhaps in the wealth that perishes, but in the consciousness of duty done, and the feeling that they had done something to lessen the burden of human misery. Many members of all the professions do work for nothing, but the medical profession not only do this but are forced to do so by the State for its own benefit. This we have no hesitation in saying is a gross injustice. During the recent election at Bradford a series of questions bearing on this matter was submitted by some medical men in the town to all the candidates. The Liberal candidates either gave no answer or a very vague one. The Unionist and Labour candidates expressed themselves opposed to forced labours exacted from medical men. In the result Bradford sent three Unionist members to Parliament, and we may hope that the step taken by the Bradford practitioners may be the first towards recognising that the medical profession does bear an unjust burden.

A BATTLE OF THE CLUBS AT BRUSSELS.

A GRAND struggle is taking place in Brussels between the medical profession and the clubs—a struggle which is due to much the same cause as that recently occurring in Cork, viz., the admission of well-to-do people who are quite able to pay ordinary medical fees into clubs where the payment to the medical men, though it may perhaps be all that a labourer or mechanic can afford, is quite unremunerative. The Brussels College of Medical Men is determined to stand by the club surgeons and to assist them pecuniarily. Negotiations have been carried on for some time past between the club official delegates and the representatives of the Medical College, but recently they came to a termination, with the result that every club surgeon in the district resigned on the 6th of this month, refusing to attend anyone but those on whom he was actually in attendance. This has made the clubs offer all kinds of inducement to outside medical men, but fortunately, as far as our last information goes, they have not been enabled—as the Cork clubs were—to find any medical men willing to accept such an invidious position as they offered them. It it to be hoped that this united action of the Brussels club officers will result in all persons, except the really poor, being compelled to pay reasonable fees for their medical advice, for, as the editor of the *Scalpel* remarks, it is altogether wrong that men belonging to the Commercial Travellers' Society, some of whom are known to have more than £1000 in the funds, should get medical advice for themselves and their families for 1*s.* 8*d.* a year.

A CORRECTION IN MEDICAL BIBLIOGRAPHY.

MR. BAILEY, the accomplished librarian of the Royal College of Surgeons of England, has just made a discovery which will be of considerable value to those who are interested in the medical bibliography of last century. Dr. John Elliot, a native of Edinburgh and graduate of St. Andrews University, became a Licentiate of the College of Physicians of London in 1762, and soon acquired a lucrative metropolitan practice as well as a good social position. His only misfortune seems to have been that MRS. Elliot was much younger than her husband and addicted to frivolity, which resulted in a divorce after three years of wedded life. Dr. Elliot was knighted by George III. in 1776, was created a baronet in 1778, and became physician to the Prince of Wales. He resided in Cecil-street, and died in Hertfordshire in 1786. His biographers have hitherto attributed to him the authorship of six treatises, including an edition of the works of the celebrated Dr. Fothergill; but Mr. Bailey shows conclusively in the current number of the *Athenæum* that the real writer of these volumes was John Elliot, a native of Somersetshire, who practised medicine in Great Marlborough-street and Newman-street. He, like his more prosperous namesake, was crossed in love, and for having fired a pistol at the object of his affections was committed to Newgate, where he died in 1787. The publications in question have been before the world for more than a hundred years, and anything connected with the life and work of Dr. Fothergill must have commanded some attention. Mr. Bailey is therefore the more to be congratulated on his sagacity, and literary men of a bibliographical turn will easily understand the satisfaction he must have felt in tracing out the successive steps of the correction which he has presented so clearly.

MEDICAL MEN AND TRADE IN ARTICLES OF FOOD.

YET another question in the ethics of medical men in relation to limited companies. They may receive—as some of our correspondents have—a circular from the managing director of such a company urging them to take first mortgage debentures which pay 6 per cent. per annum. So far so good. But the debentures will also give the holders a strong inducement to promote the sale of the particular articles by which they are to realise this high interest. The circular states as a fact that the debentures are held largely by medical men. This is a vague expression. We should be sorry to think that any considerable number of medical men had put themselves into what we consider an undignified and somewhat tied position. At any rate, for the sake of those who have not so committed themselves we venture to discuss the point and to discourage such investments. The preparations may be as good as the managing director represents. They may have all the dietetic virtues of meat and wine, of stout and champagne. But it is not for medical men to have commercial interests in a commercial monopoly of the dietetic class, on the merits of which they should have a perfectly open mind. They should be so free from interest in it as to be under no inducement to order it other than arises from its scientific claims. We cannot see that the debenture holders in this company are so free. They trade in articles which, however good to-day, may be surpassed to-morrow. To tempt medical men by direct appeals and a high rate of interest to buy debentures is not very commendable in the managing director.

PHYSICAL TRAINING IN BOARD SCHOOLS.

WE have so often had occasion to rebuke the School Board of late that it was with a feeling of relief we read the account of the Physical Training Exhibition at the Albert Hall. Competitions were held in military drill and other physical exercises, together with the interesting display by blind School Board children trained at the Normal College for the Blind. The Duke and Duchess of York were present, and her Royal Highness presented the prizes. There can be but one opinion as

to the value of instruction and training in physical exercises, and until quite lately England was sadly behind every other country in the provision made for education of this kind. Of course the upper classes and the members of the army and navy received more or less physical training, but there was nothing like the systematised instruction which exists now, and even that lags behind the training given to the youth of both ancient Greece and Rome. Having succeeded so well in this branch of education the School Board had better give up teaching physiology and the other "ologies" and devote its attention to teaching children to swim. We do not hesitate to say that the money squandered since 1871 upon insanitary buildings, and upon equally useless subjects of instruction, would have provided plenty of baths; and the sooner the board realise this fact and eliminate at least a third of the subjects they teach the better.

MEDICAL FEES AT PETTY SESSIONS.

AT the Farnham Petty Sessions on the 11th inst. a man named Claytonhill was brought up in custody from the Farnham Workhouse charged with attempting to commit suicide. The case presented no unusual features beyond the injustice to which Dr. Scott, the medical man subpœnaed, was subjected. Dr. Scott, acting on his summons, attended the court, a distance of ten miles from his home. Not only was he compelled to leave his private professional work, but in addition had to pay his travelling expenses. Moreover, he was expected to give evidence without any fee or remuneration whatever. The clerk of the court said that the justices had no power to allow Dr. Scott's expenses unless the case was sent for trial. The magistrates agreed that it was a great hardship to Dr. Scott, but that they were helpless in the matter. Under these circumstances Dr. Scott had to choose whether he would give evidence on the chance of being paid if the prisoner was committed, or decline to be sworn without a guarantee that he would receive a fee for his services. He adopted the latter alternative, whereupon the bench, who were in full sympathy with Dr. Scott, directed that a note of his refusal to testify should be taken. The chairman quite agreed that "the sooner the law was altered the better it would be for justice." It is difficult to realise that the law should be so harsh and defective as to order or even sanction that a medical man should be compelled to attend on a subpœna, and that on being sworn he must give evidence without other surety of remuneration than the contingency of the accused being committed for trial. We must admit that we were ignorant that such a state of things obtained, for in the police courts of the metropolis a medical man is paid according to a scale sanctioned by the Home Secretary for his attendance, independently of the issue of the magisterial investigation. If the petty sessional justices have no equivalent powers the sooner they acquire them the better. A system that casts such an indignity and injustice on our profession is nothing short of a public scandal.

A SUPPLEMENTARY Charter, by warrant, under the Queen's sign-manual, has been granted to the University of Durham. This Charter enables Convocation to grant to women any degrees, excepting only degrees in divinity, which they have the power to grant to men. The degrees of the University of Durham in medicine, science, arts, literature, and music are, therefore, now obtainable by women.

THE Council of the Royal College of Surgeons of England has appointed a Committee to receive a deputation of the Members of the College regarding the proposed Amended Charter on Friday, July 26th, at 3 P.M.

WE are asked to state that a meeting of members of the profession who are opposed to the proposed Bill for the Registration of Midwives will be held at St. Martin's Town Hall, Charing-cross-road, London, W.C. (small hall), on Monday, July 29th, at nine o'clock P.M. (the night before the annual meeting of the British Medical Association).

THE Dental Hospital of London will give a conversazione at the Royal Institute Galleries, Prince's Hall, Piccadilly, on Thursday, July 25th. At 8 P.M. there will be a reception by the staff of the hospital, and later Sir William MacCormac will distribute the prizes.

THE Members of the British Medical Association are invited to visit Guy's Hospital on Friday, Aug. 2nd, between 3 and 6 P.M. Cases of interest will be exhibited and tea provided.

WE are very glad to be able to inform the profession that Dr. M. Armand Ruffer, the director of the British Institute of Preventive Medicine, has made a good recovery from his recent illness.

Pharmacology and Therapeutics.

ITROSYL—STANDARD CONCENTRATED NITROUS ETHER FOR MAKING NITROUS ETHER OF B.P. STRENGTH.

TO the practitioner there is probably nothing more uncertain in the whole range of the Pharmacopœia than the composition of spiritus etheris nitrosi. Its common drawback, as is well known, is its instability, leading to an excess of acid and a deficiency in the quantity of real nitrite of ethyl. Yet in view of its undoubted value in therapeutics, how important is it that it should be of uniform and standard strength. We recognise, therefore, a departure of more than ordinary importance and value in the introduction by Messrs. Fletcher, Fletcher and Co., of Holloway, of a concentrated form of nitrous ether, which, with spirit, can be diluted at will, or to the maximum strength of the British Pharmacopœia. One ounce of Itrosyl contained in twenty ounces of rectified spirit forms, we find, a spirit fully in accordance with the requirements of the Pharmacopœia. The concentrated ether is supplied for the first time by Messrs. Fletcher in hermetically sealed glass "cartridges," which, moreover, are impervious to the action of light. Each tube contains one fluid ounce of a strength which cannot alter, since there can be no loss by leakage or evaporation, and by the use of amber-coloured glass no change by the action of light can take place. Apart from the fact that the practitioner can thus be provided with a well-known unstable drug in a permanent and reliable form, it admits also of transportation into those climates where alteration in composition is especially liable to occur. In a word, Messrs. Fletcher and Co. have taken all the precautions it is possible to take to afford the practitioner one of the most valuable drugs at his disposal which shall be of a reliable and unfailing strength.

THYROID POWDER IN PALATINOIDS.

The value of the protective influence of the palatinoid in preserving many of the organic extracts and presenting them in an undeteriorated condition is brought into further prominence as this line of treatment advances. We have recently received some palatinoids from Messrs. Oppenheimer, of 14, Worship-street, Finsbury-square, each containing thyroid powder equivalent to one-tenth of a grain of the fresh thymus gland. As with the other animal extracts

now used so largely in the treatment of disease—as, for instance, pituitary and supra-renal extracts—the jujube cover of the palatinoid acts as a hermetic seal against the decomposing influences engendered by exposure to the air, added to which the palatinoid is obviously a convenient form for the administration of these therapeutic agents.

THYROID TREATMENT OF GOITRE.

Professor Kocher of Bern has communicated to the *Correspondenzblatt für Schweizer Aerzte* his experience of the treatment of goitre by means of thyroid administration. The effect is unmistakable, he says, the swellings becoming distinctly smaller. Symptoms of suffocation may be abolished by the treatment in consequence of the diminution in size of the goitre, but in no case did the swelling entirely disappear. Only in three cases was the treatment unsuccessful, and one of these was that of a large cystic goitre in which success could scarcely be looked for; but in spite of this success Professor Kocher utters a warning against too sanguine views as to the success of thyroid treatment of goitre and expresses the opinion that this mode of treatment is not more efficacious than that by iodine. Success is only to be expected if the treatment is undertaken at the right time and is carried out with energy and patience.

BENZO-NAPHTHOL IN TROPICAL DYSENTERY.

Benzo-naphthol has been employed by Dr. José A. Clark in an epidemic of dysentery which occurred in Alquizar, Cuba, and during which he had 137 cases of the disease under treatment; of these he considered 23 as serious and 114 as of a mild type. The mortality amongst those treated with ipecacuanha and calomel, opium, &c. amounted to 9 per cent., while that amongst those treated by benzo-naphthol was scarcely more than 2 per cent. This drug had the great advantage over the more usual ones of not causing vomiting, salivation, or depression of the circulation, and it also brought patients through the attack more rapidly. Forty-five grains per diem were given to adults and but little less to children.

HYPODERMIC INJECTIONS OF CARBOLIC ACID IN TETANUS.

By means of a series of subcutaneous injections of carbolic acid Dr. Osherovski has successfully treated an apparently hopeless case of tetanus. The patient was a man who had a gunshot wound in his left leg, which was followed ten days later by tetanus, commencing in the muscles of the lower jaw and going on to general spasmodic contractions. Morphia, opium, and chloral in large doses were given without any effect, the spasmodic seizures only becoming more frequent and more severe. After the tetanus had lasted for ten days subcutaneous injections of carbolic acid of the strength of 2 per cent. were tried, twelve drops being injected every three hours. After two days of this treatment a marked improvement manifested itself, the spasmodic attacks becoming less violent and the respiration more easy. The injections were continued until twenty-eight had been given, and a few days later the patient was discharged completely recovered.

FORMOL AS A DISINFECTANT.

As a substitute for sulphurous acid, now commonly used in the disinfection of rooms and articles of wearing apparel after the occurrence of infectious disease, MM. Berlioz and Trillat some time ago proposed the use of formol or formaldehyde, and M. Bardet has recently undertaken a series of experiments in conjunction with M. Trillat which appear to show that the substance in question when prepared in considerable quantity and disengaged in a room, or even in one of the rooms of a house where all the internal doors are open, is a perfectly safe and efficacious disinfectant. They found that by the use of an apparatus converting one litre of methylic alcohol into formol per hour for six hours a set of rooms with a capacity of 300 cubic metres could be absolutely disinfected, and this without the slightest deleterious effect upon furniture or other articles contained in the rooms, a few hours' ventilation being sufficient to restore all the contents of the rooms to their original condition. The experiments were conducted by means of injecting animals with cultures obtained from pieces of woollen, cotton, or other fabric which had been previously impregnated with various forms of virus and then subjected to the action of formol after various periods.

THE PARIS SANITARY CONGRESS.

(FROM A SPECIAL CORRESPONDENT.)

Money Value of Household Refuse.—Sanitation in Private Thoroughfares.—New Method of Pneumatic Drainage.—Certified Plumbers.—Width of Streets.—Cheap Dwellings. The Liernur System.—Warming Houses.—Hot Walls and Cold Air.—Testing Chimneys.

THE first practical question discussed by the Congress related to the disposal of domestic refuse, the contents of dustbins, &c. M. Petsché, engineer, presented a report on the subject, in which he pointed out that the domestic refuse of the Parisian houses contained per ton 3 to 5 kilogrammes of nitrogenous substances, worth from 4*s.* to 6*s.*; 3 to 5 kilogrammes of phosphoric acid, worth from 9*d.* to 1*s.* 3*d.*; 2 to 4 kilogrammes of potash, worth from 8*d.* to 1*s.* 4*d.*; and some 30 to 40 kilogrammes of lime, worth from 3*d.* to 5*d.* Roughly speaking, the value of a ton of refuse might be estimated at 6*s.* to 9*s.* Consequently the domestic refuse of the Parisian houses is, theoretically speaking, worth about £200,000 per annum! Yet the Parisian contractors sell this refuse, delivered on a railway truck, for 8*d.* to 1*s.* 3*d.* the ton; the maximum charge for transit on the railways is from 2*s.* to 2*s.* 5*d.*, so that by the time it is placed on a field as manure it costs from 2*s.* 8*d.* to 3*s.* 8*d.* The utilisation of this refuse for agricultural purposes may, therefore, be expected to increase; but the question arises whether public health may not be endangered by transporting to different parts of the country refuse that may be at times infected. M. Petsché then described at length the various destructors employed in America, England, &c. M. de Montricher, who has succeeded in fertilising some of the arid, stony plains of The Crau with the refuse brought from Marseilles, explained that the refuse was loaded on the railway trucks at night at a special depôt away from inhabitants and nowhere near to passenger stations. Some discussion ensued concerning the storing of refuse in the kitchens of houses let out in flats; and M. Bechmann, engineer of the town of Paris, proposed and the Congress adopted a resolution in favour of encouraging the building of shafts down which refuse from all the kitchens in a house could be thrown so as not to remain in the apartment. Some doubts were expressed as to whether such shafts could be kept clean and would not cause a nuisance. Such shafts already exist in many of the flats in Victoria-street, London. Unfortunately, Mr. Tidman, sanitary inspector for the Westminster district, was not present at this sitting of the Congress, and therefore no evidence could be adduced as to how the system works. The question is, however, important, for in large towns the number of houses built as flats is yearly increasing, and in such houses dustbins in the yard or garden are not readily accessible. The Congress passed a series of resolutions to the effect that domestic refuse should be collected every morning and conveyed in metallic and closed receptacles that could be easily disinfected; that to utilise such refuse for agricultural purposes the railway companies should lower their tariffs and establish special isolated depôts for loading the refuse into railway trucks; finally, that the destruction of such refuse by fire was a satisfactory solution of the difficulty from the health point of view if the temperature was sufficiently high and of long duration, but that further researches should be made so as to utilise the heat and the products of the combustion.

The question of private roads was next taken in hand, and it proved a very thorny matter. The Mayor of Marseilles explained that in his town there were many places that to all intents and purposes were public thoroughfares, but which he could not control or even inspect because they were, legally speaking, private property. The Congress ultimately voted a resolution to the effect that all roads that did not belong to a town or commune, but which were frequented by the public or inhabited by different individuals, should be subjected to the same regulations, inspection &c. as governed public thoroughfares.

During an afternoon unofficial sitting M. Chardon, engineer, described the pneumatic system of drainage applied to the Levallois-Perret district, which is a modification of the well-known Berlier system. He pointed out that all the gases from the drainage-pipe in which the vacuum

was produced were burnt in passing through the furnace of his boilers. Thus, the vexed question of ventilation for sewers was avoided and the foul air sterilised. He did not pretend that the application, as made at Levallois-Perret, was perfect. The house drains were foul because the district was poor and employed little or no water; but they had at least abolished the abomination of cesspools. They removed the sewage from the houses without fouling the sewers and prevented all escape of sewer gas. The members of the Congress visited the works at Levallois-Perret and were able to see for themselves that no nuisance was produced. They were shown an ingenious method by which a vacuum could be produced in the receiving tanks by means of a steam jet which had cost £32, and did the same work as engines which had cost £1600. This invention will greatly reduce the cost of drainage by pneumatic suction.

The Congress in the morning and official sittings discussed at great length the building and draining of houses. M. A. de Baudot, Government architect, urged that architects had not progressed with the age; that they built houses as they used to build a century or more ago; that while they made thick, handsome street frontages, the walls at the back of the houses were flimsy and of insufficient protection for the inhabitants. Damp and uneven temperature resulted. M. George, architect, read a lengthy paper on house drains, concluding by proposing a series of resolutions in favour of trapping and ventilation, soil and other pipes, according to the principles well known and generally adopted in England. The only new point was a clause in the resolutions insisting that all traps and water-waste preventers or flushing cisterns should be surrounded with some non-conducting substance, so as to protect them from the frost. A good deal was said in the course of the discussion as to the necessity of enforcing the examination of, and giving diplomas to, sanitary plumbers. Mr. Tidman, secretary of the British Sanitary Inspectors Association, pointed out that in England sanitary inspectors received their diplomas from the British Sanitary Institute, and that the Plumbers' Company sent examiners all over the country to examine both in theory and in practice intending sanitary plumbers. He hoped the time would come when no plumber would be allowed to work at drains unless he possessed a diploma showing that he was fully qualified. M. Masson, sanitary inspector for Paris, explained that two schools of sanitary plumbing had been established in Paris which gave brevets of competence, after three years' training, to those who satisfactorily passed the examinations. The Congress finally adopted a resolution to the effect that such schools of plumbing should be encouraged and that certificates of competence, after examinations, should be given to working men plumbers.

The question which incidentally came forward as to the width of streets in comparison with the height of the houses elicited from M. Charles Lucas, secretary of the Architects' Central Mutual Defence Fund, a somewhat curious statement. He remarked that, as hygienists, they would be constantly tempted to vote in favour of what, as architects, they would have to combat. If a resolution proposed an ideal the majority would not vote for what as hygienists they considered as most excellent. Mr. Adolphe Smith argued that hygiene was a profession in itself. A hygienist must know something of medicine, of chemistry, of engineering, of architecture, of plumbing, and other handicrafts. They had not to consider any special professional interest or what was expedient or practical in any one particular locality, but to lay down the principle which all localities would try to realise when practicable. He thought that in this case the principle was that the direct rays of the sun should be able to reach once in the day the windows of all habitations. M. Bechmann, chief engineer of the town of Paris, protested that such a rule did not apply to tropical climates and that they were not going to pull down all Paris because of the vote of a Congress. M. E. Cacheux, engineer and administrator of the Society for the Creation of Cheap Dwellings, who read a paper on the drainage of such dwellings, also argued in favour of the direct rays of the sunlight for all inhabited rooms. Nevertheless, the Congress refused to pronounce an opinion on this point, the ideal of the hygienists evidently being thought impracticable.

M. Morin-Goustiaux, vice-president of the Government Commission on the Unwholesome Dwellings of Paris, read a paper on the necessity of an efficacious control of the sanitary appliances &c. in private dwellings. He quoted American State laws on the subject, and concluded by presenting resolutions demanding that the rules relating to plumbing work should be as uniform as possible in all towns, that all plans for drainage should be submitted to a competent authority, and no drains covered over till they had been verified and inspected and the various apparatus employed tested. M. Masson having stated that this was already done in Paris these resolutions were adopted. M. Charles Lucas brought forward a series of resolutions on cheap artisans' dwellings, demanding that in planning out such buildings greater attention should be paid to the direction of the most frequent winds; that the employment of non-conducting substances should become more general, especially for walls which, from motives of economy, had to be made very thin; that the disposition of the rooms should be such as to enable the mother to watch over her little children while attending to her ordinary domestic duties; that the walls, to admit of frequent washing, should be painted rather than papered; and that the corners should be rounded off so as to present no angles for the accumulation of dirt and vermin. All these recommendations were approved by vote.

A resolution urging that the Sanitary Bill adopted by the Chamber of Deputies, and now before the Senate, should become law at the earliest possible date was unanimously adopted; and to facilitate the creation in all localities of competent sanitary authorities, a chair of hygiene should be established in all schools of architecture. M. Jeannot explained what great service the Bureau d'Hygiene of Besançon had rendered, though its income only amounted to £28 per annum. Mr. A. Smith and M. Desmenard (general secretary of the Congress) both energetically protested that this meant work done gratuitously in their lecture hours by the medical men and the engineers who constituted such bureaux, and that none but a clerk or an office boy were paid for their services. This was not the way to bring about the sanitary reform of the country. Sanitary officials must be paid sufficiently to be able to devote their best energies to the great mission they had to fulfil.

A considerable number of papers were read in the afternoons on new inventions, such as a mask for protecting workmen from injurious dust, by Dr. Detourbe; a new method of purifying river water by propelling fresh air through the water, which was suggested by M. Robert, engineer; a system of closet pans, suggested by Dr. Châtelin, which, while offering a partial seat or rest, compelled those using the closets to assume a position in keeping with the laws of anatomy. Dr. Châtelin argued that the ordinary seat had injurious effects and created a predisposition to hernia. The spine and hips should describe an acute and not a right angle. M. de Montricher described how he had proposed to utilise large and badly constructed sewers by placing in them small and well-built sewers which would only overflow into the larger sewers when there was a heavy rainfall. Finally, Mr. Sijmons, engineer from Amsterdam, and Mr. Liernur both explained the working of the Liernur system. The latter gentlemen, however, persisted in showing that their system, as worked at Amsterdam, produced a handsome profit. It was easily shown that this profit was due to the fact that the population thus drained only yielded 3 litres per head per day of sewage and slop water. Under such circumstances the soil pipes could not be flushed, and must remain in a permanent state of filth. They claimed that they had apparatus with which they could evaporate and dry 36 litres of sewage by the consumption of 1 kilogramme of coal, but confessed that they did not raise the heat of the sewage to 100° C. How, then, was the sewage sterilised? Doubtless, under special circumstances pneumatic suction may prove a very useful motive power for drainage purposes, but as applied to the town of Amsterdam it certainly did not appear to meet with the approval of the great majority of members of the Congress. At the same time it may be admitted that, whether by suction or by propulsion, pneumatic power greatly facilitated the application of the separate system, which, it was pointed out, was becoming more and more popular in England. Two facts had helped more particularly to create the reaction in favour of the separate system. The density of population had rendered the disposal of sewage almost an impossibility. The combined system, by mixing the rainfall with the sewage, greatly added to the difficulty. With the separate system the quantity and quality of the sewage could be very accurately estimated; and whatever the condition of the weather it did not vary. It was therefore more easily treated. Secondly, we now strove to have self-cleansing sewers. But for a sewer to be self-cleansing it must be at least half filled once a day and have a sufficient fall to ensure that the water would

travel at a velocity of 760 millimetres per second. If the sewer was large enough to take rain water it was impossible to obtain these conditions. Again, to obtain a sufficient fall to ensure this self-cleansing velocity it would be necessary to raise the sewage in a great number of different places, and the raising of rain water increased the cost twentyfold. M. Masson urged that the rain water, which had washed the streets of a town, was as foul as sewage proper, and should therefore be treated as such. The discussion on the Liernur system of drainage, though very animated, did not lead to the proposal or adoption of any resolution.

Another very interesting discussion was held on the warming and ventilation of dwellings. M. Ch. A. Gautier, president of the Society of Architects holding the Government diploma, read a paper on the subject. He denounced chimneys as warming badly; objected to the looking-glass placed on the mantelpiece as checking the heat that might otherwise come from the wall; found that stoves were unwholesome and sometimes dangerous; and proposed the warming of dwellings by steam coils in the walls of the rooms. M. Emile Trélat had here an excellent opportunity to bring forward his well-known theories on the subject, and it was gratifying to note how well these theories were appreciated and understood by all present. Everybody agreed with him that warming should be by radiation and not by convection. It was the walls, the floor, the ceiling, and the furniture that should radiate heat on the persons within, but the air should not be warmed; it should, on the contrary, be as cold as possible. Differences of opinion only arose when M. Émile Trélat urged that even unwholesome dried air or a portable stove might be employed to heat a room so long as no one was in the room; then the stove should be removed or the supply of dry, hot air cut off, the windows thrown open, and kept open while anyone was in the room. Some members of the Congress thought that traces of carbon monoxide might still remain in the room even when the windows were wide open. Many argued that the nearest approach to M. Trélat's ideal was the placing of hot steam pipes in the walls and the ample opening of windows. A great deal was said about the injury done by stoves, notably to people who lived in apartments above, and who suffered from the defective construction of chimneys. A resolution was passed that chimneys, before they are used, should be tested by the authorities in the same manner as soil-pipes are tested to see that there is no leakage. This was, perhaps, one of the most original and practical suggestions made during the whole of the Congress.

Such, briefly, are some of the main subjects discussed at the Congress during the course of the week. It must be confessed that some of the architects and engineers present showed that they had only just commenced to study sanitary questions. Several of the speeches were but lame reproductions of what had been said at previous congresses. This, however, was to be expected. The Congress was more disappointing in so far as the engineers and architects did not bring forward as many plans and projects for the practical application of sanitary principles as had been anticipated. Nevertheless, the Organising Committee and M. Desmenard, its energetic secretary, are to be congratulated on having grouped together some 300 persons in a congress, particularly as most of the members were architects and engineers, and there were, comparatively speaking, but few medical men and old tried sanitary reformers. So it may be said that new ground has been opened up, that a new class of sanitary reformers have come forward, and all this will help in the good cause.

Paris, July 15th.

YAWS OR FRAMBŒSIA.[1]

THIS large and voluminous blue-book, consisting of 368 pages and illustrated by numerous coloured plates and drawings, is an exhaustive contribution by Dr. H. A. Alford Nicholls, the Special Commissioner selected by the Secretary of State to conduct an investigation and furnish a report to the Colonial Office on the subject of which it treats. Dr. Nicholls in describing the nature and scope of his inquiry alludes to the fact that he had received a communication from the late Sir George Buchanan, the medical officer of the Local Government Board, containing suggestions as to certain matters relating to the investigation and the line of action to be followed. The question is one of great importance in those tropical countries in which the disease prevails, and the facts which Dr. Nicholls has been fortunate enough to make public are not only of interest in themselves, but they tend to throw a new light upon the subject and to call for a reconsideration of the theories respecting it which have been put forward by previous writers. Dr. Nicholls is of opinion that the great obstacle to the successful treatment of the disease in its different types has been the ignorance which has hitherto prevailed about its pathology. He has therefore set himself to work this out in order to place its treatment on a proper scientific basis.

It would be impossible within any reasonable compass to consider the large mass of material which accumulated in Dr. Nicholls's hands during the course of his mission to the various islands. The consideration which he has bestowed upon its arangement and analysis will no doubt prove of value in the way of reference to future inquirers, but the material is still very voluminous and not easily condensed for the purposes of a review. The disease known as yaws or frambœsia was, he tells us, unquestionably introduced into the West Indies by negroes brought from the coasts of Africa as slaves; indeed, some of the older West Indian medical writers mention the fact of negroes suffering from yaws being landed from slave ships from Guinea. But there is no definite information obtainable, in regard to each island, as to whether the spread of the disease among the slaves on the plantations was due to the direct importation of affected persons from Africa or to an introduction and spread of the infection from a neighbouring colony. Yaws is the name that has been applied to the disease by the English from the time of the slave trade. The name "frambœsia" was constructed by Sauvages in 1761 to designate the cutaneous tumours which, when divested of their crusts were considered to resemble raspberries. The French word *framboise* was Latinised into frambœsia. Several other names have also been given to the malady. Dr. Nicholls considers that the Celtic word *ias*, pronounced *yas*, and meaning heat, boiling or bubbling up, is the source of the English derivation of yaws. His experience teaches him, he says, that yaws is not a cachectic, impetiginous, or an exanthematous disease, but that it properly belongs to the group which the late Dr. Tilbury Fox called the diathetic diseases, and is to be included in the same category as scrofula, syphilis, and leprosy. It is not simply a local cutaneous affection, but seems to be a general disease, of which the eruption is only the local manifestation. The mistaken belief of so many authors that yaws is identical with syphilis has caused the question of the origin of the two diseases to be brought into a state of confusion. The considerations of this matter, in view of disentangling the difficulties surrounding the origin of yaws and of those connected with the geographical distribution of the disease, are well worked out by Dr. Nicholls. Yaws prevails throughout the tropics of the New World. It is found in various parts of South America and Central America, and is especially prevalent in the West Indies and in Brazil—in fact, in those countries of tropical America to which most of the African slaves went. It is said to exist in all parts of tropical Africa, but the west coast appears to be its endemic focus. The African islands off Mozambique, including Madagascar, are also reported to be infected, and naturally cases are occasionally met with in the northern countries bordering on the Mediterranean. There does not seem to be any conclusive evidence, however, that it prevails in any Asiatic country. For a description of the symptoms of the disease our readers cannot do better than refer to Dr. Nicholls' report, to the plates illustrating its local features and manifestations, and the narrative of cases given by him and others. Without doubt one of the most important and disastrous complications of yaws is syphilis. When yaws and syphilis occur as intercurrent affections very destructive ulcerations may ensue. Mercury is necessary for the treatment of the syphilis, but its effect is very prejudicial in yaws.

Dr. Nicholls and Mr. Francis Watts, the Government chemist of Antigua, performed a good deal of pathological and bacteriological work together at the Chemical Laboratory in Antigua in connexion with this inquiry; and with the

[1] Report on Yaws in Tobago, Grenada, St. Vincent, St. Lucia, and the Leeward Islands, addressed to the Right Honourable Lord Knutsford, G.C.M.G., H.M.'s Principal Secretary of State for the Colonies, by H. A. Alford Nicholls, M.D., F.L.S. London: Printed for Her Majesty's Stationery Office. 1894.

aid of scientific apparatus from England Dr. Nicholls was able to carry on and complete these investigations on his subsequent return to Dominica. Some of the results of these researches are summed up as follows :—

"A microbe in the form of a micrococcus was found constantly in the secretion from the granulomata characteristic of yaws, which was successfully cultivated in nutrient media, and pure cultures were obtained to the third generation. The microbe was discovered in abundance in the affected tissues of persons suffering from the disease, and no other pathogenic microbe was found in association with it. In no instance was this micro-organism discovered in the blood, although it was successfully multiplied in the serum in drop cultures. It was found and successfully cultivated in Antigua, St. Kitts, and Dominica, and under identical conditions in these three islands. Pure cultivations of the micrococcus of yaws showed that its microscopical characters were constant, and that its macroscopical appearances differed from those of micrococci already discovered and described in various works on bacteriology. The lower animals are probably immune, inoculations giving negative results, as did also the inoculations from the secretions of the granulomata. In the absence of the concluding proofs of the pathogenesis of the microbe—viz, the production of the disease in healthy animals by inoculation of pure cultivations and the after discovery of the micro-organism in the fluids or tissues—it cannot yet be positively declared that the micrococcus is the contagium of the disease. But Dr. Nicholls and Mr. Watts, in view of the attributes of the disease being clearly indicative of its origin and causal connexion with a microbe, and of the fact that they were able to establish that a micrococcus is its constant accompaniment, as well as of the subsequent discovery by Dr. Nicholls of the microbe in the lymphatic system and in various organs of a patient who died from yaws, consider themselves justified in inferring that the micrococcus is nevertheless the cause of the disease and that it invades the system through the lymphatics. It is important to observe, in connexion with the bearing it has on the mode of propagation of this malady, that the micro-organism has been found in the dust on the floor of rooms in which yaws patients have been living, and that, as a matter of experiment, it is capable of retaining its vitality of growth and multiplication for a considerable time. The clinging of the contagion to certain huts and localities, and the occurrence of a sudden outbreak of the disease when the heavy rains of a tropical climate moisten the earthen floors are therefore capable of explanation.

We have said enough to show that the results of the latest investigations, if ratified by subsequent researches, are likely to throw a new light upon the subject of yaws, and to call for a reconsideration of the views that have been previously held in respect to it. We may usefully conclude this article by referring our readers to one that appeared in THE LANCET of June 21st, 1873, on the disease in question.

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE WEBER-PARKES PRIZE AND MEDALS.

WE have received from Dr. Edward Liveing, the Registrar of the College, the following particulars respecting Dr. Hermann Weber's Prize Foundation in the College, and have pleasure in calling the attention of the profession to them.

The prize is of the value of £150 or thereabouts, and will be awarded triennially to the author of the best essay upon some branch of the subject of Tuberculosis, especially with reference to pulmonary consumption in man. The first award will be made in 1897, and the adjudicators have selected as the subject for the essay "The Means, Prophylactic or Curative, deemed by the author to have value in the control of Tuberculosis, especial regard being had to their application to Human Tuberculosis." This subject was selected by Dr. J. E. Pollock, Dr. Thorne Thorne, and Professor W. S. Greenfield, who were nominated by the President of the College, and these gentlemen will have the onus of adjudicating between the essays. The essay must be based on original work and observations (experimental or other) of the author, and must include a detailed exposition of the methods employed and their mode of application.

The following are the full regulations for the guidance of intending competitors :—

THE WEBER-PARKES PRIZE AND MEDALS.

Regulations.

1. That the prize founded by Dr. Hermann Weber, in memory of the late E. A. Parkes, M.D., be termed the "Weber-Parkes" Prize.

2. That the prize be awarded triennially to the writer of the best essay upon some subject connected with the etiology, prevention, pathology, or treatment of tuberculosis, especially with reference to pulmonary consumption in man; that in making the award the College have regard to careful collection of facts and original research.

3. That the value of the prize be 150 guineas, or such sum as the interest accrued on the capital, after payment of expenses, will permit.

4. That a bronze medal be awarded to the holder of the prize, and a similar medal, to be distinguished as the second medal, to the essayist who comes next in order of merit.

5. That an Adjudication Committee be nominated on each occasion by the President from among the Fellows of the College, and that it be the duty of such committee to select the particular subject for competition.

6. That the same committee which selects the subject shall adjudicate upon the essays sent in upon that subject, the President having power to fill up any vacancies which may have occurred meantime in the committee.

7. That the adjudication be made every three years at some time previous to St. Luke's Day, when the prize and medals will be presented to the winners.

8. If, in the opinion of the judges, no essays are presented of sufficient merit to deserve either the prize and first medal or the second medal respectively, that the College be at liberty, on the recommendation of the judges, to award either one or both to the author or authors of any original work or works on the subject produced within the preceding three years which may be deemed worthy of the same; and in the absence of such work or works that the corresponding award or awards be not made, and the sum assigned for the same be added to the capital amount.

9. That the subject for the next ensuing competition be selected and advertised within a period of three months from the last presentation; or, failing any award, from the day on which the prize would have been presented had an award been made; and that the competing essays be delivered to the Registrar on or before July 1st in the year of the award.

10. That the competition be open to members of the medical profession in all countries. The essays to be typewritten and in English; or if written in a foreign language to be accompanied by a translation into English.

11. That each essay bear a motto, selected by the writer, who shall insert his name within a sealed envelope having the motto on the cover, the envelope being transmitted with the essay to the Registrar, who shall return the unsuccessful essays to their authors.

12. That the prize essay become the property of the College, and that the College may grant its author permission to publish it if he so desire.

13. That the medals shall present on the obverse the bust of the founder; on the reverse a design relating to the prevention and treatment of pulmonary tuberculosis, with the inscription (exergue), "Prevention and Cure of Tuberculosis," and that the name of the recipient and the date of the award be placed on the edge of the medal.

THE CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF DRINKING-WATER FROM THE STANDPOINT OF THE MEDICAL OFFICER OF HEALTH.

THAT there has within recent years been a decided change in the attitude of the medical officer of health towards the value to be attached to chemical analysis few will question, and it is perhaps a debatable point whether the reaction which has taken place in favour of the bacteriologist may not have led to a somewhat exaggerated importance being accorded to the results of the bacteriological examination of water. In former days the dictum of the chemist in regard to any given water was accepted as final, and the water stood condemned or absolved according to the results which the sample submitted yielded. At the present time the chemist has to some extent been superseded by the bacteriologist, and the dictum of the latter is now by some considered to be as conclusive as was that of the chemist in former days. Under these circumstances it is hardly to be wondered at that bacteriological methods should be subjected to some criticism at the hands of the chemist. To those who would seek to study the question from the chemist's standpoint we would commend an able article by Dr. Dupré, F.R.S., which appeared recently in the *Analyst*, and to those who, like ourselves, are approaching the subject from the standpoint of the medical officer of health we cannot do better than advise the perusal of a paper which appeared also in the *Analyst*, and which has now, together with Dr. Dupré's paper, been issued in pamphlet form. For the information of our readers we will,

in the first instance, refer briefly to one or two of the salient features of these papers, and in conclusion will offer a few remarks upon the main question.

Chemical analysis shows us, Dr. Dupré contends, in ninety-nine cases out of a hundred whether a water is polluted by sewage or not, more particularly so if the plan proposed by himself and Mr. Hehner be adopted of comparing the water under examination with one from the same district and formation, which the surroundings show to be unpolluted. This latter proviso seems to us a somewhat important concession from the chemist's standpoint, since it practically means that apart from a study of a water's environment chemical analysis may be misleading. As far, however, as we are aware this method adopted by Dr. Dupré is not a universal one among chemists. By the detection of pollution the chemist is able, Dr. Dupré urges, to anticipate danger, whereas the bacteriologist is only able to discover pathogenic organism after disease has already been caused; or, as he graphically expresses it, the chemist can close the stable door before the steed is stolen, the bacteriologist can only close it after the steed has gone. The answer to this argument is obvious, and Dr. Dupré, anticipating the bacteriologist's objection that in the bacillus coli he has as fine an index of pollution as the chemist, replies that chemical analysis stands condemned because it is unable to detect pathogenic organisms, and he infers that on this ground the chemist and bacteriologist must fight their battle. The estimation of a water's safety by reference to a numerical standard of micro-organism is a method for which Dr. Dupré has little sympathy. Are we to be told, he observes, that the deep-well water of the Kent Water Company is an admirable drinking-water as it comes from the well, and absolutely unfit for drinking one or two days afterwards? For the detection of unfiltered sewage biological examination takes, Dr. Dupré thinks, first rank; but it is, he maintains, not pollution such as this which either the chemist or the bacteriologist is, as a rule, called upon to detect. In the case, for instance, of a well water, many of the micro-organisms may have been separated by filtration through the soil and subsoil, and it is in cases such as these that Dr. Dupré would claim for the chemist an easy victory. Experiment with artificially polluted water where a little fæcal matter and no urine are added is not, he contends, a fair test, as the conditions thus established unduly favour the bacteriologist. The "conveniently small measure" adopted by bacteriologists for recording their results is also matter for Dr. Dupré's criticism. "How beautifully free from impurity," he says, "would most water, or even sewage, appear if we stated our analytical results in parts per cubic centimetre instead of parts per 100,000." And, again, "What would be thought of a man who, if he found no fish in, say, ten cubic feet of sea water, were to pronounce that there are no fish in the sea?" Chemical and bacteriological examination of water should, Dr. Dupré considers, be used in conjunction with one another, but if one only is available that one should be the chemical. This, briefly stated, is the chemist's view. Dr. Thresh's paper is one which should certainly be read by every medical officer of health. He refers in a most lucid manner to the difficulties which beset the medical officer of health in his endeavour to find suitable water-supplies for his district; and he quotes cases where both chemical and bacteriological examinations have failed to indicate danger where the physical surroundings of the water have demonstrated it, and conversely where chemical analysis condemned a water when the environment absolved it from suspicion. Dr. Thresh approaches the subject as a medical officer of health, but in stating the fact it is well to remember that he is also a distinguished chemist. Without unduly deprecating the value of chemical and bacteriological analysis, Dr. Thresh insists upon the paramount importance of the physical surroundings of a water's source. Our expectations with regard to the value of bacteriological analysis have, Dr. Thresh observes, not altogether been realised, and its results are as likely to mislead as are those of chemical analysis. The numerical standard of the bacteriologist he considers as "illogical as the old chemical standards; both depend upon quantity, whilst the real issue is quality."

We confess that Dr. Thresh's attitude is one with which we feel ourselves largely in accord. It seems to us that in selecting a water to be used for drinking purposes *negative* evidence—i.e., failure to find evidence of suspicion—whether it be afforded by the chemist or the bacteriologist, is of very little value. Roughly, the one or the other expert reports, from his point of view, on one day only out of the 365 which make up a year. On the other 364 days samples submitted to the one or the other expert might have elicited a very different statement of fact. This being so, it is clear that the physical circumstances of the water's source are all-important, since they are, within moderate limits at least, constant for all the 365 days of the year. On the other hand, still referring to the selection of a water for drinking purposes, *positive* evidence against it as afforded by a single testing of the chemist or the bacteriologist is not to be accepted as absolutely convicting the water. It may be that the particular water is liable to an occasional and fleeting pollution from a contaminating agency that is no essential condition of its physical circumstances; and again, therefore, a strict examination of the surrounding circumstances of that particular water might altogether modify the adverse judgment arrived at by the chemist or the bacteriologist. As regards a water suspected of having caused epidemic disease just the same difficulty arises as to the value of *negative* evidence, whether chemical or bacteriological. In nineteen cases out of twenty neither chemist nor bacteriologist can speak of the water as it was at the time it was causing disease; and here again, therefore, the risk of specific pollution as evidenced by the surroundings is the all-important factor.

EVASIONS OF THE ADULTERATION ACTS.

WHILE it is impossible to withhold all sympathy for the retail dealer who has brought a conviction on himself by neglecting to use "reasonable diligence," we have none for the man who exercises his utmost ingenuity to deceive. The Sale of Food and Drugs Act legalises the sale of mixtures of chicory with coffee, and of margarine with butter, or alone, provided that the seller gives with it "a legible label" to that effect, the practice of taking the sample from a mass so labelled not being sufficient, since it is impossible to ensure the latter being in full view of the purchaser. But in any case the word "legible" is, like all relative terms, unsatisfactory—legibility depending on each person's acuity of vision, on the amount of light, and on the position and arrangement of the lettering. It is not at all unusual to find the qualifying words printed in the smallest type, or placed obliquely in a remote part of the label with the evident intention that they shall be unobserved. If the clause be more than a fiction or formality, the words which show that "things are not what they seem" should be as large and conspicuous as those which, taken by themselves, would convey a false impression—in fact, would be untrue. Mr. C. M. Atkinson, stipendiary magistrate at Leeds, ably argued the question, not of intent to defraud but of the sufficiency of such a label in a case in which a "purchaser" asking simply for "cheese," and pointing to a piece on the counter, was served with three pounds cut from it without a word of explanation. The label on the mass was "Valleyfield (finest oleine) Cheese," in three lines, the words "finest oleine" being in small, the others in capital letters; and the magistrate maintained that the words "oleine" and "cheese" should have been equally legible, if not combined in one. We might add that the word "oleine" does not either scientifically or technically meet the requirements of the Act, for oleine is a normal constituent of butter fat, and the legal description of these added fats is "margarine." The public have learnt the purport of the word; but in the case in question the purchaser, a labourer acting under the direction of the inspector, read the word on the label as "Curline," and was naturally unable to attach any meaning to it. Nor would he, as the magistrate remarked, have been much wiser if he had read it correctly, and, as he himself had done, found it defined in a dictionary as "the thin oily part of fat." It conveys no suggestion of the addition of foreign matter, whereas "margarine," having been discarded from scientific nomenclature, has been happily appropriated by the Act as a designation for all such artificial mixtures of extraneous fats. The Sale of Food and Drugs Act has now been in force for twenty years, and must be submitted to revision. Not only

should the qualifying words be connected with those they qualify and equally *legible*, but they should be equally *intelligible*. "Mixed" and "prepared" do not by themselves sufficiently indicate the nature of the process—the removal of a portion of the fat and of the woody fibre to make a fine soluble cocoa being no less a "preparation" than the addition of equal weights of brown sugar and potato starch.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the Council was held on the 11th inst., the President, Mr. Christopher Heath, being in the chair. The President reported the result of the election of members of the Council, as given in THE LANCET of July 6th; and Mr. Alfred Willett, Mr. Treves, Mr. Butlin, Mr. Alfred Cooper, and Dr. Ward Cousins were introduced, and made a declaration in the terms of the oath prescribed by the Charter of 1800, and took their seats as members of the Council.

A recommendation by the Museum Committee was adopted, to the effect that the skeleton of a Diornis Maximus be purchased from the Canterbury Museum, Christchurch, New Zealand, for £70, and that Mr. Barlow of the Natural History Museum be employed to set up the skeleton.

The gift by Miss Greenhill of several volumes in MS. of a lexicon of Greek medical terms, compiled by the late Dr. Greenhill of Hastings, was accepted with the best thanks of the Council.

The President reported the half-yearly meeting of Fellows on the 4th inst., at which forty-five Fellows, including fourteen members of the Council, had attended, but that as no notices of motions had been given for the meeting no discussion of any kind took place.

The Council proceeded to elect two members of the Board of Examiners in Dental Surgery, Mr. Barrett being re-elected and Mr. Frederick Canton being elected.

The Council directed that the annual calendar should be completed to this date, and that the usual number of copies thereof be printed and offered for sale at 1*s.* per copy.

The following statement of attendance of members of Council during the past collegiate year was read:—

(Eleven meetings of the Council in the year.)

Name.	Meetings attended.
Sir T. Spencer Wells, Bart.	9
Mr. Jonathan Hutchinson	9
Mr. Wm. Cadge	10
Mr. Thomas Bryant	11
Mr. Thomas Smith	11
Mr. J. W. Hulke (died after seventh meeting) ...	7
Mr. Christopher Heath, President	11
Sir William Mac Cormac	10
Mr. A. E. Durham (died after ninth meeting) ...	8
Mr. N. C. Macnamara	11
Mr. Oliver Pemberton	9
Mr. Reginald Harrison, Vice-President	11
Mr. Alfred Willett, Vice-President	11
Mr. T. Pickering Pick	10
Mr. H. G. Howse	11
Mr. John Langton	11
Mr. W. Mitchell Banks	9
Mr. W. Rivington	11
Mr. T. R. Jessop	9
Mr. F. Howard Marsh	11
Mr. J. Tweedy	11
Mr. Henry Morris	11
Mr. A. W. Mayo Robson	9
Mr. J. Hardie	6

A letter was read, dated the 6th inst., from Mr. W. G. Dickinson, asking the Council, on behalf of the Committee of the "Society of Members," to appoint a committee to confer with a deputation on the subject of the proposed alterations in the Charter. The Council appointed for this purpose the committee which already exists for the purpose of receiving deputations from Fellows. A petition was read from the London School of Medicine for Women, asking the Council to admit women to the examinations for the diploma of Membership. The matter was referred to the Committee of Management.

Mr. Christopher Heath was re-elected President, and Mr. Reginald Harrison and Mr. Pickering Pick were appointed Vice-Presidents, as we announced last week.

Mr. J. H. Targett was reappointed Pathological Curator.

The next ordinary meeting of the Council is to be held on Monday, the 29th inst.

THE HOME OFFICE INQUIRY INTO THE CASE OF THOMAS WEIR.

WE have received the report of the inquiry ordered by Mr. Asquith, as Secretary of State for the Home Department, into the cause of death of a patient named Thomas Weir of St. Anne's Heath, Virginia Water. The inquiry was held by Mr. Gully, Q.C., the present speaker of the House of Commons, assisted by Dr. Savage, and the specific direction it was to take is given in the following words:—"To report to the Home Secretary upon the treatment of Thomas Weir, upon the sufficiency of the supervision under which it was carried out, and on the regulations, rules, and by-laws in force in the said hospital so far as relates to their adequacy to secure the proper treatment and supervision of insane patients." The inquiry showed that Weir had been subjected to the form of restraint known as "the dry-pack" (an apparatus consisting of a blanket, straps, and webbing, so arranged as to limit the movement of the limbs in cases of maniacal excitement with violence), and that he died of exhaustion and collapse after undergoing the treatment. Dr. Savage, while finding the dry-pack a useful remedy in cases of mania both as a curative and restraining process, is of opinion that in Weir's case the use of the apparatus was excessive. The report goes on to say that in the administration of the treatment "almost every ordinary and proper precaution seems to have been neglected," and gives in detail the reasons for arriving at this severe conclusion. Certain recommendations made by the Lunacy Commissioners last autumn with reference to this case are published as an appendix to the report and receive the concurrence of Mr. Gully and Dr. Savage. The three more important ones run as follows:—(1) That the use of the "dry-pack" in the form employed at the Holloway Sanatorium ought not to be permitted, the older form of packing in blankets without straps being much preferable; (2) that mechanical restraint in institutions for the care of the insane should only be employed upon the direct authority of the superintendent or his official deputy; and (3) that restrained patients should be continuously watched by skilled attendants and visited at short intervals by members of the medical staff.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

St. Helens Urban Sanitary District.—We cannot notice the report as to this district without a brief reference to the former medical officer of health, the late Mr. Robert McNicoll, to whose memory the present medical officer of health, Dr. John Robertson, contributes a fitting obituary notice. Mr. McNicoll practised medicine in St. Helens for fifty years, and for over twenty of those years he acted as medical officer of health to the borough; he was one of the first medical officers of health appointed in England. Those of our readers who can recall Mr. McNicoll's valuable annual reports will not need to be reminded of the excellent and conscientious work which he performed, and as Dr. Robertson aptly puts it, had Mr. McNicoll lived but a few days longer he would have seen the completion of a public testimonial to him in the founding of "The McNicoll Scholarship" at the Cowley Middle Schools. This is a fitting testimony to his memory. There was, Dr. Robertson observes, a decrease in the birth-rate of St. Helens in the middle of 1894, and he attributes it in all probability to the

coal strike in the autumn of 1893. Commercial disaster such as this generally, as he points out, influences both the marriage and birth rates. Out of every 1000 births in St. Helens during 1894 31·5 were illegitimate, a proportion higher than in any other of the previous twelve years. In deploring the high infantile mortality Dr. Robertson expresses his satisfaction that the sanitary authority have appointed a female sanitary inspector, and one of her duties is to advise as to the feeding and rearing of young infants. Female factory labour does not, according to the report before us, operate as a cause of infantile mortality in St. Helens, and there is, therefore, Dr. Robertson remarks, no need for artificial feeding. Infantile vaccination appears to be well carried out in St. Helens, and this is in large part due, we are told, to the excellent influence which Mr. McNicoll, as public vaccinator, had in the district.

Blackpool Urban Sanitary District.—Calculated on the average number of persons per house in the case of the six wards of which Blackpool is made up, the population is estimated at 30,337, while on the assumption that the last intercensal increase has been maintained the population is estimated at 28,203. The corrected death-rate for 1894 was 13·45 per 1000. Dr. Jasper Anderson has constructed an interesting table showing the length of residence in Blackpool of each person dying during 1894, and from this it appears that out of 481 deaths only 170 were of persons who were born in the district. Dr. Anderson has also continued his investigations into the causes of the high infantile mortality-rate in Blackpool, and he furnishes a table showing the cause of death and the ages at death of children dying in the district during the ten years 1884–93. The figures obtained he compares with those of 1889–91 for Preston, Leicester, and Blackburn, the three towns having the highest infantile mortality, and also with those for the counties of Hertfordshire, Wiltshire, and Dorsetshire, where the infantile mortality is lowest. The comparison shows that in Blackpool a larger proportion of children are born who only survive their birth for a few days than in any other of the districts with which comparison is made. Taking the deaths in the first month of life it appears that 5078 deaths would occur in Blackpool out of 100 000 births, as compared with 3488 in the three counties and 4947 in the three towns. We wish we had space to reproduce Dr. Anderson's tables, as they are very instructive. Coming to the causes of death, Dr. Anderson finds that prematurity and atelectasis accounted for 3289 deaths out of 100 000 births in Blackpool, as against 1436 and 2428 for the counties and towns respectively, and he thinks that possibly this excess in Blackpool may be due to the fact that the stamina of the inhabitants of Blackpool is not up to the average of that in the three towns, owing perhaps to the immigration of partially worn-out townsfolk into the borough, and he is, too, inclined to think that the social conditions of Blackpool favour premature confinements. In this connexion he refers to the fact of the Registrar-General having drawn attention to the gradual increase in deaths from prematurity and congenital defects in England and Wales during recent years. Particulars are also given by Dr. Anderson of the feeding of 225 children who died between the first and twelfth months of life, and the results show that 51 per cent. were never fed at the breast, whilst of the total number only 25·5 per cent. were fed at the breast during their whole lives.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6395 births and 4033 deaths were registered during the week ending July 13th. The annual rate of mortality in these towns, which had risen in the four preceding weeks from 15·4 to 17·5 per 1000, further increased last week to 19·9. In London the rate was 21·0 per 1000, while it averaged 19·0 in the thirty-two provincial towns. The lowest rates in these towns were 8·9 in Huddersfield, 10·2 in Swansea, 10·5 in Brighton, 11·7 in Halifax, and 12·4 in Cardiff; the highest rates were 22·1 in Leicester, 26·0 in Salford, 26·4 in Preston, 27·4 in Wolverhampton, and 30·2 in Liverpool. The 4033 deaths included 877 which were referred to the principal zymotic diseases, against 494 and 665 in the two preceding weeks; of these, 584 resulted from diarrhœa, 126 from measles, 72 from diphtheria, 54 from whooping-cough, 37 from scarlet fever, 23 from "fever" (principally enteric), and 1 from small-pox. No fatal case of any of these diseases occurred last week in Halifax; in the other towns they caused the lowest death-rates in Brighton, Swansea, Derby, and Huddersfield, and the highest rates in Salford, West Ham, Leicester and Preston. The greatest mortality from measles occurred in Manchester, and West Ham; from whooping-cough in Birkenhead, Oldham, and Burnley; from "fever" in Sunderland; and from diarrhœa in Wolverhampton, Bradford, Salford, Leeds, Preston, and Leicester. The mortality from scarlet fever showed no marked excess in any of the large towns. The 72 deaths from diphtheria included 50 in London, 5 in West Ham, and 4 in Liverpool. One fatal case of small-pox was registered in London, but not one in any of the thirty-two large provincial towns. There were 72 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, July 13th, against 22, 34, and 42 at the end of the three preceding weeks; 36 new cases were admitted during the week, against 8, 25, and 17 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2241, against 1732, 1894, and 2044 on the three preceding Saturdays; 342 new cases were admitted during the week, against 251, 319, and 311 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 160 in each of the two preceding weeks, rose last week to 187, but were 5 below the corrected average. The causes of 53, or 1·3 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Cardiff, Nottingham, Oldham, and in ten other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Salford, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·2 and 19·4 per 1000 in the two preceding weeks, further rose to 20·3 during the week ending July 13th, and was 0·4 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 15·3 in Dundee and 16·5 in Edinburgh to 26·8 in Greenock and 32·0 in Paisley. The 585 deaths in these towns included 72 which were referred to diarrhœa, 18 to whooping-cough, 14 to measles, 10 to "fever," 6 to scarlet fever, 1 to diphtheria, and not one to small-pox. In all, 121 deaths resulted from these principal zymotic diseases, against 78 and 93 in the two preceding weeks. These 121 deaths were equal to an annual rate of 4·2 per 1000, which was slightly below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of diarrhœa, which had been 26, 43, and 57 in the three preceding weeks, further rose to 72 last week, of which 40 occurred in Glasgow, 11 in Paisley, and 7 in Greenock. The deaths referred to whooping-cough showed a further increase upon the number recorded in recent weeks, and included 10 in Glasgow and 3 in Dundee. The fatal cases of measles, which had been 14 and 18 in the two preceding weeks, declined again to 14 last week, of which 5 occurred in Glasgow, and 2 each in Edinburgh, Leith, Paisley, and Greenock. The deaths from scarlet fever, which had been 1 and 5 in the two preceding weeks, further rose to 6 last week, and included 3 in Edinburgh and 2 in Glasgow. The 10 fatal cases of "fever" considerably exceeded the number in any recent week, and included 4 in Glasgow, 2 in Edinburgh, and 2 in Leith. The deaths referred to diseases of the respiratory organs in these towns, which had been 99 and 79 in the two preceding weeks, declined again to 80 last week, but exceeded by 19 the number in the corresponding week of last year. The causes of 46, or nearly 8 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had increased from 20·1 to 24·9 per 1000 in the three preceding weeks, declined again to 20·0 during the week ending July 13th. During the thirteen weeks of last quarter the death-rate in the city averaged 27·3 per 1000, the rate during the same period being 16·7 in London and 18·8 in Edinburgh. The

134 deaths registered in Dublin during the week under notice showed a decline of 33 from the number in the preceding week, and included 16 which were referred to the principal zymotic diseases, against 9 and 11 in the two preceding weeks; of these, 10 resulted from diarrhœa, 3 from "fever," 2 from small-pox, 1 from diphtheria, and not one either from measles, scarlet fever, or whooping-cough. These 16 deaths were equal to an annual rate of 2·4 per 1000, the zymotic death-rate during the same period being 5·3 in London and 2·3 in Edinburgh. The fatal cases of diarrhœa, which had increased from 3 to 6 in the three preceding weeks, further rose to 10 last week. The 3 deaths referred to different forms of "fever" exceeded the number recorded in any recent week, and the 2 fatal cases of small-pox were the first registered within the city during the past three weeks. The 134 deaths in Dublin last week included 26 of infants under one year of age, and 27 of persons aged upwards of sixty years; the deaths both of infants and of elderly persons showed a marked decline from the numbers recorded in the preceding week. Seven inquest cases and 5 deaths from violence were registered; and 41, or nearly a third, of the deaths occurred in public institutions. The causes of 13 or nearly 10 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

CHITRAL.

THE following paragraphs have been published in the *London Gazette*:—

"War Office, July 16th, 1895.—The Queen has been graciously pleased to signify her intention to confer the decoration of the Victoria Cross upon the following officer, whose claim has been submitted for Her Majesty's approval, for his conspicuous bravery during the sortie from Chitral Fort on March 3rd last, as recorded against his name:—Surgeon-Captain Harry Frederick Whitchurch, Indian Medical Service. During the sortie from Chitral Fort of 3rd March last, at the commencement of the siege, Surgeon-Captain Whitchurch went to the assistance of Captain Baird, 24th Bengal Infantry, who was mortally wounded, and brought him back to the fort under a heavy fire from the enemy. Captain Baird was on the right of the fighting line, and had only a small party of Gurkhas and men of the 4th Kashmir Rifles. He was wounded on the heights at a distance of a mile and a half from the fort. When Surgeon-Captain Whitchurch proceeded to his rescue the enemy, in great strength, had broken through the fighting line; darkness had set in, and Captain Baird, Surgeon-Captain Whitchurch, and the Sepoys were completely isolated from assistance. Captain Baird was placed in a dooley by Surgeon-Captain Whitchurch, and the party then attempted to return to the fort. The Gurkhas bravely clung to the dooley until three were killed and a fourth was severely wounded. Surgeon-Captain Whitchurch then put Captain Baird upon his back and carried him some distance with heroic courage and resolution. The little party kept diminishing in numbers, being fired at the whole way. On one or two occasions Surgeon-Captain Whitchurch was obliged to charge walls, from behind which the enemy kept up an incessant fire. At one place particularly the whole party was in imminent danger of being cut up, having been surrounded by the enemy. Surgeon-Captain Whitchurch gallantly rushed the position, and eventually succeeded in getting Captain Baird and the Sepoys into the fort. Nearly all the party were wounded, Captain Baird receiving two additional wounds before reaching the fort."

"India Office, July 15th.—The Queen has been graciously pleased to nominate and appoint Surgeon-Major George Scott Robertson, C.S.I., Indian Medical Service, British Agent, Gilgit, to be a Knight Commander of the Most Exalted Order of the Star of India."

INDIA AND THE INDIAN MEDICAL SERVICES.

The following appointments and transfers are ordered:—Surgeon-Captain T. W. Gibbard to hold collateral charge of the Civil Surgeoncy at Shwebo, vice Surgeon-Captain K. Prasad; Surgeon-Captain K. Prasad to be Civil Surgeon of the Toungoo District, vice Surgeon-Captain A. R. P. Russell; Surgeon-Captain A. R. P. Russell to be Superintendent of the Rangoon Central Gaol, vice Surgeon-Major R. E. S. Davis; and Surgeon-Major R. E. S. Davis to be Junior Civil Surgeon and Superintendent of the Lunatic Asylum, Rangoon, vice Surgeon-Lieutenant-Colonel O. Baker, who departs on leave. Surgeon-Major S. J. Thomson (Bengal), Deputy Sanitary Commissioner, North-West Provinces and Oudh, to be Sanitary Commissioner, North-West Provinces and Oudh, sub *pro tem*, from date on which he assumed charge of the office from Brigade-Surgeon-Lieutenant-Colonel G. Hutcheson, M.D. Surgeon-Lieutenant-Colonel A. S. Jayakar (Bombay), Agency Surgeon at Maskat, is appointed to hold Charge of the current duties of the Office of Political Agent at Maskat, in addition to his other duties, until further orders. Surgeon-Captain H. E. Drake-Brockman, Civil Surgeon, 2nd class, whose services have been replaced at the disposal of the Government of the North-West Provinces by the Government of India Home department, to the Muttra District. Surgeon-Major E. S. Brander, Civil Surgeon, from Muttra to Sitapur. Surgeon-Major C. C. Vaid, Civil Surgeon, from Sitapur to Hardoi. Surgeon-Captain D. W. Scotland, Officiating Civil Surgeon, from Orai to Azamgarh.

NAVAL MEDICAL SERVICE.

The following appointment has been made:—Surgeon and Agent: William Doughty at Torcross and Hallsands.

VOLUNTEER CORPS.

Artillery: 1st Kent (Eastern Division, Royal Artillery): Surgeon-Major. C. Arrol, M.D., to be Surgeon-Lieutenant-Colonel. 1st Lincolnshire (Western Division, Royal Artillery): The undermentioned gentlemen to be Surgeon-Lieutenants:—Thomas William James Allen; George Henry Grimoldby. 2nd West Riding of Yorkshire (Western Division, Royal Artillery): Surgeon-Lieutenant J. C. Wright is appointed Lieutenant. *Rifle:* 2nd Volunteer Battalion the Royal Welsh Fusiliers: Surgeon-Lieutenant W. D. Fraser, M.B., to be Surgeon-Captain.

INDIA: MEDICO-MILITARY NEWS.

THE latest Anglo-Indian papers contain several interesting items of intelligence, some of which may be briefly summarised for the information of our readers. The question of the future policy as to the retention or not of Chitral is engaging very serious attention, and a great difference of opinion prevails on the subject. The advocates and followers of a "forward policy" are, of course, for its retention, but the opponents of this policy are, it seems to us, able to urge many very weighty objections, especially from a statesmanlike and finance point of view. The matter is one for grave consideration, and as the force will, it is understood, remain until September before returning to India the present Government will have ample time for deliberation. Meanwhile we learn that there is a good deal of sickness amongst the European troops at Chitral and heavy casualties among the baggage animals, and the daily cost incurred by the forces remaining over the frontier is very heavy irrespective of what will be the amount of the initial and final expenditure. Enteric fever is said to be somewhat prevalent in the Chitral relief force and the British troops suffer a good deal from exposure. The field hospital at Chitral is hard worked. According to telegrams from Simla there were on June 19th last 13,964 troops engaged on the relief expeditionary force. Of these 6611 were British, of whom 286 were on the sick list, while out of 12 348 native troops only 228 were returned as ineffective from sickness. The chief sickness was amongst the Gordon Highlanders, King's Own Scottish Borderers, the Buffs, Bedfordshire Regiment, and King's Royal Rifles. The native force is comparatively healthy. The season in India has apparently been a very hot one, but the occurrence of the rains has diminished the temperature and lessened the sickness. Heat apoplexy has been prevalent among the troops at Peshawar and Kurrachee, and several deaths from this cause have occurred.

THE QUEEN AT ALDERSHOT.

Accompanied by Princess Beatrice, the Marchioness of Lorne, and Prince and Princess Henry of Battenberg, Her Majesty arrived at Aldershot on Friday, July 12th, for a two days' visit, and evinced great interest in a physical display by a class of non-commissioned officers who have just completed a six months' course of training. As we pointed out in our article on the Royal Military Tournament[1] these men are trained under the direction of Colonel Fox,

[1] THE LANCET, June 1st, 1895.

by a system which develops every muscle of the body, while the mental powers, so far as they affect alertness and pre-ence of mind, are trained to a degree that could not be attained under the old system. Other physical displays also took place, including one by the Egyptian fellaheen under Sergeant-Major De Vere. The Royal visit was brought to a close by a review of the troops on Laffan's Plain on the following Saturday.

A PORTABLE COOKING APPARATUS.

According to the *Army and Navy Gazette*, Staff-sergeant Fowler of the Medical Staff Corps has invented a portable cooking apparatus which presents some new features. The object is to furnish the army medical service with the means of providing patients under all circumstances with the same varieties of diet that are obtainable in station hospitals. It is claimed that the apparatus will cook with half the camp allowance of fuel and is capable of supplying large quantities of boiled or distilled water.

HOSPITAL FOR INFECTIOUS DISEASES AT PESHAWAR.

The Government of India have sanctioned the estimates for the erection of a special hospital for contagious diseases for all native troops at Peshawar.

Surgeon-Lieutenant-Colonel Coates, A.M.S., Surgeon-Captain Russell, A.M.S., and Surgeon-Captain Key, Volunteer Medical Staff, have been selected as medical officers at the Camp of Instruction of the National Artillery Association at Shoeburyness on Aug. 3rd.

The examination at the end of the seventieth or summer session of the Army Medical School will commence on July 23rd and terminate on July 29th. The session will be brought to a close on July 31st, when the prizes will be presented to the successful candidates by Surgeon-General Sir Joseph Fayrer, K.C.S.I.

It is stated that the Government of India has sanctioned an estimate of Rs. 11,964 for building a special hospital for contagious diseases for all native troops at Peshawar.

Correspondence.

"Audi alteram partem."

"THE PHYSICS OF CARDIAC SOUNDS AND MURMURS."

To the Editors of THE LANCET.

SIRS,—Under the above heading there is in THE LANCET of June 15th and 22nd a long article by Dr. J. T. R. Davison which ought not to be allowed to pass without comment. We may agree with Dr. Davison that the closure of the aortic valves is due to the increase of tension in the aorta caused by the incoming current of blood. By the laws of fluid pressure, and in consequence of the existence of the pouches of Valsalva, the sigmoid valves will close as soon as the pressure on their aortic aspect exceeds that on their ventricular aspect. But his theory that the second sound "is directly produced by the latter part of the ventricular contraction, owing to the semilunar valves being thrown into sonorous vibrations by the latter part of the ventricular stream impinging against the ventricular surface of these valves in the act of their closing in," is at once condemned by the observations of Roy and Adami with the myocardiograph.[1] For the tracings obtained by means of this instrument from the hearts of mammals by these skilled and careful experimenters prove conclusively that the second sound does not occur until the ventricular contraction has ceased, at the end of an interval, measuring two-thirteenths of the whole cardiac cycle, subsequent to the closure of the sigmoid valves and synchronously with the sudden diastolic expansion of the ventricle. Again, we may agree with Dr. Davison that the mitral valve closes as soon as the ventricular tension has been raised so as to exceed the auricular. But his theory that "the first sound is the direct result of the auricular contraction," being caused by the impact of the stream from the auricle on the closed mitral valve, is easily disproved by the myocardiograph. For the commencement of the first sound is precisely synchronous with the sudden systolic rise of the ventricular tracing, and it continues during nearly the whole period of the ventricular contraction. And this extraordinary theory involves the astounding proposition that while the mere tail-end of the contraction of the thin-walled auricle is capable of producing the loud first sound, the contraction of the thick-walled ventricle, which must cause great strain of the mitral segments (as is proved by the very existence of the chordæ tendineæ), is incapable of producing any sound at all. Dr. Davison even maintains that the cardiac impulse is due to the auricular and not to the ventricular contraction, and he offers as proof the observation that it occasionally distinctly precedes the carotid pulsation. As if the blood-current took no time at all to pass from the ventricle to the carotid, and as if the time required might not be, by various circumstances, occasionally prolonged.

Dr. Davison attempts to explain cardiac murmurs by observations of the sounds heard on auscultating "a small piece of fresh intestine" filled with water and ligatured at both extremities, when an oblique stream of water is suddenly introduced into it through a tube fastened into one of its ends, quite regardless of the dissimilarity between the continuous wall of such an intestine and the damaged valves of heart disease, and of the obvious fact that "a small piece" of intestine full of stagnant fluid and with its ends ligatured can in no way represent the physical conditions either of the empty ventricle at the instant of diastolic expansion or of the aorta through which the blood stream is flowing.

I am, Sirs, yours truly,

DAVID B. LEES, M.D., F.R.C.P.

Weymouth-street, W., July 14th, 1895.

[1] Roy and Adami: Heart-beat and Pulse-wave, Practitioner, vol. lxiv.; Roy and Adami: Physiology and Pathology of the Mammalian Heart, Philosophical Transactions of the Royal Society, 1892, B.

IRISH WORKHOUSE REFORM.

To the Editors of THE LANCET.

SIRS,—In a communication addressed to you on May 31st by Sir Philip Smyly and Mr. Hepburn on behalf of The Irish Medical Association it was stated that "on carefully examining in detail the replies from seventy-nine (medical) officers of workhouses who had furnished information), we find that forty-three infirmaries have no trained nursing, the nursing being entirely in the hands of pauper women." It has since been pointed out to this council that the latter part of this sentence is inaccurate. We are informed, and believe, that in forty-three out of the seventy-nine infirmaries no trained nurse is employed, but that, in many instances, the nursing is under the supervision of untrained nurses, many of whom are as competent as an untrained nurse can be expected to be. As regards these infirmaries it is not correct to say that "the nursing is entirely in the hands of pauper women," and the council therefore begs to withdraw that statement and to express its regret that a statement capable of such an interpretation should have been made. The presence of a single untrained nurse in a workhouse infirmary containing (on average) sixty-three patients cannot however materially modify the assertion that the nursing arrangements of such a hospital are totally insufficient, especially when the multifarious duties devolving upon this untrained nurse are considered. She is practically the porter of the infirmary, must keep all doors leading to the house and to the female wards locked, and must open them herself when egress or ingress are needed; must serve out all food and keep an account of it, be responsible for all clothes received from the laundry and sent to it, and generally oversee all the pauper women employed. Manifestly an official charged with those duties is more of a matron than a nurse, and can contribute very little to the care and comfort of the sick inmates.

The council has learned with much satisfaction that the Local Government Board has addressed to the guardians of each union a circular note requesting them to obtain from the medical officer a specific report as to the nursing, sanitation, and diet in the workhouse hospital, and suggesting that the visiting committee of the guardians might with advantage confer with the medical officer respecting any changes which would conduce to the comfort of the sick inmates. The council, while highly approving of the course suggested, submits that the reports and conferences indicated would prove much more effective if the visiting committees and the medical officers were supplied with some brief suggestions as to the requirements of a well-ordered workhouse

infirmary, and with a series of definite questions as to whether such requirements are or are not fulfilled. It is scarcely to be expected that all visiting committees and their officers are *au courant* with the conditions as to air, space, ventilation, sanitary accommodation, &c., which are regarded by modern sanitarians as an indispensable minimum for a workhouse infirmary, and the council, therefore, apprehends that unless some guidance in this direction is afforded to the administrators of workhouses, the efforts of the Local Government Board to arrive at the truth may prove to some extent abortive. It is, unfortunately, quite unnecessary to exaggerate the deficiencies of the workhouse infirmary system, and the association has no other object than to elicit the truth, the whole truth, and nothing but the truth, respecting the accommodation for the sick poor throughout the country.—We are, Sirs, yours truly,

AUSTIN MELDON, J.P., D.L.,
Past President R.C.S.
Dublin, July 15th, 1895. ARTHUR H. BENSON, F.R.C.S.I.

"IS METEOROLOGY A SCIENCE?"

To the Editors of THE LANCET.

SIRS,—Dr. Gowers invites me to define the word "science." I should be sorry to attempt to do what he finds so difficult, but I agree with him that the term turns much upon the use of words. I also agree that the expression may be applied in a very general sense to all regions of knowledge where observations are made and inferences drawn. I have already said that in this large sense as a branch of knowledge meteorology may be classed amongst the sciences. At the same time, it seems to me to stand quite alone and is not amenable to the usual methods of scientific inquiry. Observation does not make a science. The ancients were good observers, but it was left to the moderns to adopt altogether new methods of investigation and experimentation. At the present time if we wish to discover the nature of any object we do so in connexion with its surroundings. If these are changed the qualities of the object itself change, so that under different conditions the same thing may be solid or liquid; it may freeze or scorch the hand which touches it. Its qualities could not spontaneously change in this manner; they must be due to an external force. Man can have no existence outside the atmosphere any more than a fish out of water. In astronomy all the laws have reference to the relation of the heavenly bodies to one another. Newton first showed us how all their movements are dependent on the forces of attraction between them. The slanting axis of the earth, causing the rays of the sun to fall upon the earth with different obliquities, determines the characters of the animal and vegetable world. Even in astronomy we have a counterpart of the experimental method, for should the sun be eclipsed men of the greatest eminence will traverse the globe to study its light under the new conditions, or to observe a transit of Venus to enable them to calculate the sun's distance. Moreover, should any irregularity appear in the celestial world we seek for a cause, for it was considered impossible for Uranus to display perturbations in its orbit without the existence of a Neptune. I cannot, therefore, agree that meteorology is as much a science as astronomy. It seems to me that in all branches of inquiry which are called scientific we are investigating the relation of different bodies to one another. We alter the surroundings, and the phenomena or character of the object also alter. If we discover that a change has taken place in an object in nature we ask what is the external force which has been acting upon it. Now, as regards the earth and its satellite we know enough to understand why the seasons and the tides occur, but we know nothing of the altered conditions which produce the daily changes styled "weather." We know nothing of the earth's environments except the sun. All we do at present is to make use of the telegraph to inform us as to what is going on at a distance, but we predict nothing. No one foresees whether we shall have a cold or hot winter and a dry or wet summer. It seems to me that we have no data whatever to guide us. In all other branches of science we study the effects of the surroundings on objects, or the relation of things to one another, since every object is conditioned or depends in an unknown measure on its environments. In meteorology no method of this kind is or can be pursued, for we know nothing of the earth's environments but the sun and moon, and the latter has long been put out of court. It was this view of the matter that made me say it was a fair question to ask, Is meteorology a science? Dr. Gowers asks, What is the difference between science and knowledge? I should answer, They run into each other. Science is systematised knowledge—as, for example, in the case of the rotundity of the earth. At the time when people believed the earth was flat the arguments for its being round might be called scientific, but now that the shape of the earth is accepted by everyone it becomes common knowledge and ceases to be science. I must trespass no more on your space with a subject foreign to the designs of THE LANCET.

I am, Sirs, your obedient servant,
Grosvenor-street, W., July 15th, 1895. SAMUEL WILKS.

To the Editors of THE LANCET.

SIRS,—In reference to the leading article in THE LANCET of June 29th last, on the scientific position of meteorology, I beg to offer a few comments on the position taken up by the writer in the *Edinburgh Review*. He suggests that "it is not a science" if it consists merely in observing and recording temperatures and pressures, but he may be referred in confutation of this opinion to a paragraph further on on astronomy. He there says "that thousands of years had passed in patient observation before the motion of the heavenly bodies was understood." Astronomy has usually been considered a sublime and respected science for ages past; yet it chiefly consists in observing the heavens daily and hourly by instruments and recording the matters seen. Meteorology really should be considered a kindred and allied science to astronomy, of equal calibre and scientific position, as both are founded on the observations of natural phenomena and require the use of instruments of precision. Further on, forecasting of weather is considered derogatory to the scientific position of meteorology, but the laws of probabilities are included in the science of mathematics, and prognosis is part of the science and art of medicine.

A serious view of the character of meteorological science has not yet, however, been entertained by the British public, and the results of its labours and aspirations are still tabooed and neglected officially. We have seen the consequences of this abnegation in the disasters that befall water companies in winter by frozen pipes, and in summer by dried-up reservoirs, by ignoring past meteorological investigations and results. We have seen it neglected in warlike operations, when John Bull could not believe that the Crimea would be visited by such an Arctic winter (in 1854-55), as he estimated that it would only be like such as he was accustomed to see in Hyde Park. The authorities fifty years further back (in August, 1809) had not the means of knowing what the climate of Walcheren was like, or that it was any different from that of the Thames; and so they saw thousands of our soldiers die and perish under a broiling sun and the paludal mists of the Polders. It is scarcely credible that the War Office of the time had not provided our medical officers with meteorological instruments for use in the expedition in 1801-2, and so they came and went knowing nothing of the climate they lived in. Both the French and Indian armies had seen to this provision having been made in 1801-2 for ascertaining the features of the weather and atmosphere of Egypt during their marches through the country and in stationary camp quarters. If meteorology, then, is to be of any good it must be acknowledged as a science fit to minister to the wants and life of the nation, by its professors and workers being recognised as investigators and accumulators of valuable information. I am, Sirs, yours faithfully,

July 16th, 1895. OBSERVER.

P.S.—In a lecture by Mr. Clement Wragge before the Royal Society of Tasmania, reported by the *Hobart Mercury*, May 22nd, 1895, the following words occur:—"Mr. Wragge, who was received with applause, referred to the distinction between the sciences of astronomy and meteorology. The study of the latter enabled forecasts to be made which were of infinite value to all kinds and conditions of men."

THE SOCIETY OF MEDICAL PHONOGRAPHERS.

To the Editors of THE LANCET.

SIRS,—Will you kindly grant me space to express a hope that any members of the profession who use shorthand, and may be intending to join our society, will do so at once by

communicating with Dr. Neil, Warneford Asylum, Oxford? We are anxious to include as many as possible before the general meeting on the 30th. Although we have now 154 members we find that there are still many who should join and have not yet done so. Among the visitors whose presence we hope for on the 30th (at 4 P.M. at 20, Hanover-square) are General Sir Charles Wilson, K.C.B., K.C.M.G., the Director-General of Military Education, and Dr. J. H. Gladstone, F.R.S., who has used phonography in scientific work since 1846. I may add that the varied service the society is rendering to its members far exceeds, both in degree and character, our early anticipations. To this many members could bear strong testimony.

I am, Sirs, yours faithfully,
W. R. GOWERS, President.

Queen Anne-street, Cavendish-square, W., July 13th, 1895.

"THE REMUNERATION OF MEDICAL OFFICERS TO PROVIDENT ASSOCIATIONS, CLUBS, ETC."

To the Editors of THE LANCET.

SIRS,—If Dr. Paget Thurstan accepts my figures, I must ask him to do so having some regard to the statements which accompany them. My illustration represented an outside estimate, for the reasons which I gave, but Dr. Thurstan has fallen into two further errors—first, in assuming that each person was necessarily attended professionally on each of his nine days' sickness; and, secondly, in concluding that all of the attendances were visits. At least two-thirds of the patients call on the medical officer. I am far from upholding that the present rates are adequate; in fact, I distinctly said the opposite—viz., that we must look forward to raising them. But I say that when a medical man receives regularly £200 a year for attending daily either at their homes or at his surgery some fifteen persons (1½ per cent. of 1000) he is in most instances glad to get it.

I am, Sirs, yours faithfully,
July 16th, 1895. W. G. DICKINSON.

*** This correspondence must now cease.—ED. L.

"THE DANGERS OF COCAINE."

To the Editors of THE LANCET.

SIRS,—Your annotation on "The Dangers of Cocaine" in THE LANCET of July 6th will, I hope, attract attention to the increasing use of cocaine. You speak, however, of persons getting "into the habit" of taking it. But in the inquest to which as I suppose you refer there was no evidence whatever that the deceased had used it in this way. On the contrary, the evidence was conclusive that this bottle of medicine had been in the possession of the deceased for at least twelve months. The points that need to be elucidated are whether, say, ten grains of the mixture, as prescribed for application to the gums, could kill in a short time if taken by mistake, or whether the explanation is not rather to be found in the possibility of a fungus growing in the bottle if kept for a length of time. In either case it is surely time that cocaine should be scheduled as a poison or that at any rate some special label should be placed on the bottle as a caution.

I am, Sirs, yours faithfully,
July 13th, 1895. ONE WHO WISHES TO KNOW.

ERRATUM.—Dr. Alderson's letter in the last issue of THE LANCET should obviously have been headed Fracture of the Lower End of Humerus, not "Femur."—ED. L.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Small-pox: Vaccination and Revaccination.

DR. HOPE, the medical officer of health, in his last annual report dealt very exhaustively with small-pox as it appeared last year, and showed very conclusively that but for the activity with which every case was traced and followed up there would most certainly have been a very serious epidemic of the disease. Liverpool has always a very large proportion of what may be called "migratory citizens," and it must be obvious that these have in times of epidemic the capacity of carrying the infection to all parts of the city, and even beyond this limit. The lamentable case which occurred on board the *Clarence* training ship will be remembered as a notable instance. It is to be hoped that the scare produced will induce all these citizens who have not been revaccinated to adopt this most satisfactory mode of protection. It may also be remembered that the local watch committee passed a resolution to the effect that all candidates for the police force should undergo revaccination to the satisfaction of the police surgeon. How necessary this is may be judged from the fact that out of thirteen candidates who presented themselves to the surgeon on a recent occasion only two had been revaccinated, one of these cases being very doubtful. Of the remaining eleven, one refused to undergo vaccination, and the remainder submitted. Another candidate, who appeared more recently, had been vaccinated in infancy and had contracted small-pox mildly during the recent epidemic in Warrington. He was, therefore, excused from revaccination.

An alleged Female Thief aged ten simulating Fits.

A local detective was induced to watch the movements of a girl aged ten, which were somewhat suspicious. He saw her with her hand in the pocket of a passer-by, and on seizing it the girl apparently went into a fit. On taking her to the hospital the resident surgeon pronounced it to be a case of shamming. The girl was accordingly taken to Bridewell, and on the house of her parents being searched several articles of stolen property were found secreted there. The parents professed to be wholly ignorant of the girl's alleged thefts. The case is still *sub judice*.

Assaults on the Police.

In consequence of the action of the stipendiary magistrate in sending to prison those charged with assaults on the police (unless it were a first offence), a period of two months recently passed without any member of the force being incapacitated from duty. Unfortunately, the spell has been broken and assaults have again become serious. In one case an officer was struck on the head with the buckle of a belt, producing a scalp wound, with very severe hæmorrhage; in another the officer was bitten, a dangerous and disgusting form of assault which has too often followed a drinking bout. In each case the offender was sent to gaol with hard labour.

July 16th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Death of Dr. David J. Brakenridge, Edinburgh.

AFTER an illness of about two months' duration Dr. David J. Brakenridge died at his residence in Edinburgh on July 10th, at the age of fifty-six years. Dr. Brakenridge was a graduate of the University of Edinburgh and a Fellow of the Royal College of Physicians of Edinburgh. Although comparatively young he had completed his years of service as a physician to the Royal Infirmary, and on his retirement a few years ago was made a consulting physician to the institution. He was also a physician to Chalmers Hospital at the time of his death. Dr. Brakenridge took a somewhat active part in medical affairs, especially at the Royal College of Physicians, and being a man of decided individuality made himself a good deal felt. He was always honest and honourable, however wrong his policy and attitude might be considered by those disagreeing with him. As a clinical teacher he gave great promise in the earlier years of his connexion with the Royal Infirmary, and he always attracted a select body of students. His mind was, perhaps, too subtle and critical to attract the ordinary student, who was seeking hard and fast rules and indications to enable him to pass examinations. The best known of his contributions to medical literature are those which dealt with the administration of disinfectants for the prevention and treatment of scarlet fever and other infectious diseases, caffein as an adjunct to digitalis in cardiac cases, and more recently his introduction and advocacy of blood transfusion in the treatment of pernicious anæmia. He took a great interest in the epidemic of influenza which appeared in Edinburgh in 1890, and opened a discussion on the subject at the Medico-Chirurgical Society. Had he lived he would in ordinary

course have been offered the presidential chair at the College of Physicians. He was much esteemed by those who knew him intimately, and his loss is very deeply mourned by a large circle of friends. He was buried on Saturday, his funeral being attended by almost every member of the profession in Edinburgh. His wife survives him, but there are no children.

Public Health Matters in Edinburgh.

At the meeting of the town council of Edinburgh last week it was remitted to the Public Health Committee "to consider the suitability of the ground adjoining Craiglockhart poorhouse belonging to the city parish council as a site for the new city hospital, with powers to employ experts, if so advised, to negotiate with the parish council to complete a provisional agreement for the acquisition of a portion of the property at a price to be fixed by arbitrators mutually chosen." It was also stated that there were 193 patients in the city hospital, of whom 134 were suffering from scarlet fever. There had been no cases of small-pox for six weeks, and negotiations were being carried on with the Trinity Hospital Committee for a piece of ground to which it was hoped the small-pox hospital in the Queen's Park would be soon removed.

Medical Examinations in Edinburgh.

The July examinations in Edinburgh for the Scottish Triple Qualification are almost concluded; and this week the second professional examination will begin at the University, while at the end of the week the first professional will begin.

Edinburgh Royal Society.

At the Edinburgh Royal Society this week Professor T. R. Fraser made another communication on snake poison and immunity produced by the action of anti-venene. In serum therapeutics immunity was obtained by subcutaneous injection, but the method was attended with inconvenience which might be avoided by introducing the poison through the stomach. Serpent's venom was destroyed or nearly so in the stomach, so that when introduced in that way it was inert. He had, however, made experiments which showed that a measure of resistance could be induced by administration in this way. Some of his results he thought might explain the immunity enjoyed by certain snake-charmers in India, for subcutaneous injection was not likely to be the method employed by them for the introduction of the protection-producing venom. The results might also explain the protection possessed by venomous serpents. The anti-venene obtained from serpents themselves was, however, not so effective as that obtained artificially, but he thought the natural anti-venene might be increased, and a sufficiently powerful anti-venene obtained very rapidly by injecting successive doses of venom into the serpents themselves. If this should prove to be the case, a most valuable means of rapidly producing anti-venene would be available, and Professor Fraser will have not only thrown light on a most interesting question, but provided means for saving many lives by counteracting the bite of the more poisonous snakes. Our medical officers in the East will doubtless put this work to the test of practical application as soon as material is available for the purpose; for it is there, and not at home, that the value of Professor Fraser's work will have to be practically tested.

University of Glasgow.

The following appointments to lectureships at Queen Margaret College are intimated:—Mr. James Blyth, F.R.S.E., Natural Philosophy; Mr. Thomas Gray, B.Sc., Chemistry; Dr. C. O. Hawthorne, Materia Medica and Therapeutics; Dr. J. Lindsay Steven, Pathology; Dr. J. Wallace Anderson, Practice of Medicine; Dr. Alexander Tille, German Language and Literature. Dr. W. J. Fleming has resigned his lectureship on Surgery and Clinical Surgery, as his term of office as Surgeon to the Royal Infirmary will expire before the commencement of the next winter session. The University Court will proceed to fill the vacancy at their meeting on the 26th inst. On the same date the Court will also make an appointment to the Chair of Divinity, rendered vacant by the resignation of Professor Dickson. The term of office of Dr. Ralph Stockman as Examiner in Materia Medica and Therapeutics and that of Mr. Aikman, B.Sc., as Examiner in Chemistry having expired, these positions are now declared vacant. Candidates must send in their applications before the 25th inst. Whatever views may be held as to the general policy of the Scottish University Commissioners, one of their latest ordinances will almost certainly receive unanimous approval. This is the ordinance abolishing the stamp duty on the degree of M.D. It has been the law hitherto that on proceeding to that degree the graduate must pay the sum of £10 3*s.* as Government duty. He will now only have to pay the University fee of five guineas. I observe from the University Calendar just issued that the application of the medical lecturers at Queen Margaret College to take part in the degree examinations has been refused. It is difficult to understand the reason for this refusal. The policy of the Scottish University system insists upon the importance of the teacher taking a prominent part in the examination of his own students, but under the present arrangement, whilst this policy is put into practice with regard to the men students, the teachers of the women students are excluded from any part in the examination. This is certainly not equal treatment for the two sexes.

Medical Magistrates.

In the list new of justices of the peace for Ayrshire are the names of Dr. Alexander Macleod M'Rae, Rankinston, and Dr. William Alexander Caskie, Largs.

The Ambulance Challenge Shield.

The Ambulance Challenge Shield, which has been won this year by the 1st Volunteer Battalion Highland Light Infantry, was on the 9th inst. formally presented to Colonel R. C. Mackenzie on behalf of the battalion, and by him handed over to Bailie Primrose for safe custody for the year by the Corporation of Glasgow. The ceremony took place in the City Chambers and was witnessed by a large number of volunteer medical officers as well as by representatives of the general public. The presentation was made by Surgeon-Lieutenant-Colonel William R. Smith, vice-president of the Volunteer Medical Association. He explained that the challenge shield had been instituted for the purpose of stimulating ambulance work in the volunteer regiments throughout the country, and he hoped that the fact that it had come north of the Tweed would have a good influence on ambulance training in the whole of Scotland. He congratulated the successful competitors, and paid a tribute to Surgeon-Lieutenant Swanson, under whom the winning team had been trained. Surgeon-Lieutenant-Colonel Smith also intimated the reception of a letter from the Duke of Cambridge, in which His Royal Highness expressed it as his wish and pleasure that it should be publicly announced that he congratulated the 1st Volunteer Battalion Highland Light Infantry on the distinguished honour which their representatives had obtained. The shield has been placed in the Corporation galleries, and has aroused much interest in the city.

University of Aberdeen.

The following gentlemen have been appointed examiners in the Faculty of Medicine for 1895-96:—Botany: R. J. Harvey Gibson, M.A. Aberd., University College, Liverpool. Zoology: J. A. Thomson, M.A. Edin., School of Medicine, Edinburgh. Chemistry: John Hunter, F.I.C., F.C.S., School of Medicine, Edinburgh. Anatomy: Thos. W. Griffith, M.D. Aberd., Yorkshire College, Leeds. Physiology: W. H. Thompson, F.R.C.S., Queen's College, Belfast. Materia Medica: Francis Warner, M.D. Lond., London. Medical Jurisprudence and Public Health: Fras. J. Allan, M.D. Edin., London. Pathology: Jas. Lorrain Smith, M.A., M.D. Edin., Cambridge. Medicine: J. Rose Bradford, M.D., D.Sc. Lond., F.R.S., London. Surgery: John C. Ogilvie Will, M.D. Aberd., Aberdeen. Midwifery: John W. Ballantyne, M.D. Edin., School of Medicine, Edinburgh.

July 16th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Poisoning in a Young Ladies' Boarding School.

ANOTHER death has occurred in the Limerick Convent. The victim in this instance was one of the boarders, a young lady aged eighteen, the daughter of Mr. Edward O'Flynn, J.P., a resident of Cork. A sad feature in the case was that the holidays were at hand and the parents were looking forward to the pleasure of seeing their daughter within a few days. Sir Charles Cameron has not yet completed his analysis, and the nature of the poison still remains a mystery.[1] However,

[1] Sir Charles Cameron's description of his investigation will be found on page 147.—ED. L.

a statement of the cook may tend to elucidate matters. In her evidence she says she was doubtful with regard to the freshness of one of the eggs used in making the custard, and the custard was made on the day prior to that on which it was eaten. It must be remembered that the weather was very hot, and it is quite possible that this egg caused an extensive development of ptomaines in the whole custard. As I have already mentioned, two nuns were the only inmates of the institution who escaped poisoning, and they had not partaken of the custard. Sir C. Nixon was brought down from Dublin to assist the local medical men in treating the sufferers and investigating all the circumstances of the extraordinary occurrence. Though the lives of all the patients cannot yet be pronounced to be out of danger, the medical men are very hopeful that no more deaths will occur. Meantime the report of the analyst is anxiously looked forward to, not alone by the general public, but also by medical practitioners, who are naturally interested in the scientific aspects of the case.

The Elections: Attack on a Medical Man.

The contest in Cork lies between Parnellites and Anti-Parnellites, and the political leanings of one of the local medical men are well known to incline towards the Anti-Parnellites. Last Sunday whilst driving in the suburbs he was met by a crowd returning from a Parnellite meeting and was struck on the head by either a hand or stick. His hat was broken, but he received no serious injury. I must say this is a very unusual occurrence, for even in times of great excitement the populace in Ireland treat medical practitioners with the greatest courtesy.

Health of Irish Cities.

The following death-rates show that Cork and Waterford are in a healthy condition:—Belfast, 27·1 per 1000; Limerick, 26·7; Dublin, 24·3; Cork, 18·0; and Waterford, 10·0.

Out-door Musical Promenades for the Working Classes of Cork.

The Mayor of Cork has taken an important step towards procuring healthful amusement for his poorer fellow citizens. Through his instrumentality an Amusements Committee has been formed for the purpose of providing bands to play in the evening in the beautiful suburbs surrounding Cork. Captain Adam, Band President of the 1st South Lancashire, wrote to say that the band of his regiment, with the entire approval of the officers, proposed to give a military concert in one of the city halls for the purpose of raising a fund in aid of the Mayor's project. This generous offer was gladly accepted, and a strong inducement will be held out to the working classes to enjoy the fresh air.

The Disappearance of Typhus Fever in Belfast: a Correction.

In the report on the health of the city of Belfast for 1894 in our last issue (p. 117) it is said that "typhoid" fever is dying out; this should be *typhus* fever.

Irish Workhouses and the Irish Medical Association.

I understand that the Local Government Board has sent circulars to the various boards of guardians, asking for information in reference to the serious allegations made by Sir Philip Smyly, M.D., and Mr. W. J. Hepburn, F.R.C.S. Edin. (the chairman and honorary secretary of the Irish Medical Association), relative to the condition of Irish workhouses. The committee appointed by the Belfast board of guardians to look into this matter reported that, as a result of their investigations these complaints did not apply to the Belfast Workhouse. The nursing staff, they say, is ample and efficient; the food is of excellent quality, and is varied and suitable for different ailments under treatment; the beds are of the newest and most improved description for infirmary and hospital use; and the sanitation and ventilation are both good. The medical officers have no suggestions to submit at present, as all their previous recommendations have been carried out. The committee add that they regret that the allegations should have received so much publicity in view of the fact that the workhouses concerned are not indicated. At a meeting of the Lisburn board of guardians Dr. Mackenzie, medical officer, reported on July 9th in reference to the condition of the workhouse and inmates, in accordance with the desire of the Local Government Board. The report was generally favourable, but the medical officer stated that the diet of the inmates was insufficient and would require revision. One of the guardians present said he was astonished to learn that yellow Indian meal, which the farmers gave to their cattle, was one of the articles of diet. He disapproved of this, and thought with Dr. Mackenzie there should be a change. The report was referred to the House Visiting Committee.—The committee appointed by the board of guardians overseeing the Ballymoney Workhouse handed in a report stating that the house was in a satisfactory condition, with which the medical officer concurred, and that the remarks of the Irish Medical Association did not in any way apply to their institution.—Dr. Fleming, medical attendant at the Omagh Workhouse, reported to the guardians, in reply to the Government Board Circular, that the nursing and caretaking of the patients in the infirmary was insufficient. There are six wards in the infirmary proper and two large ones in the main body of the house all under the care of one nurse. He recommended the employment of an assistant nurse under the supervision of the present one, whose health is endangered by hard work and confinement. He approved of the food as being fair.

Proposed Extension of Belfast Boundary.

It is stated that the Corporation of the City of Belfast intend to have an Act of Parliament introduced during the next Parliamentary session in order to extend the borough boundary so as to take in the area embraced within the Parliamentary boundary. One great advantage of this extension will be that certain districts in which there is at present a defective sanitary arrangement will be properly drained. The Ligoniel suburb is at present in a most unsatisfactory condition, and in the east side of the city the Connswater River is in a deplorable state. Both these areas would be made right under this new scheme.

Portrush Waterworks.

The Local Government Board have sanctioned a loan of £2000 for the improvement of these waterworks. It is hoped that the proposed changes in these works will give a water-supply that both in quantity and quality will be sufficient for such a popular and rapidly-growing seaside resort as Portrush now is.

Death of Mr. English, of Keady, co. Armagh.

I regret to have to announce the death of Mr. English, at his father's residence, Keady, co. Armagh, of pneumonia, on July 14th. He had been in failing health for some time. Mr. English was a Licentiate of the Royal Colleges of Physicians and Surgeons, Edinburgh. He was a young medical man, greatly liked.

Cork Societies' Medical Officers' Indemnity Fund.

Mr. Donovan, the honorary secretary of the above fund, has received £10 from the Yorkshire Branch of the British Medical Association.

Mr. Joseph Edward Kenny, L.R.C.P., L.R.C.S. Edin., L.A.H. Dub., the newly elected member of Parliament for the College Green division of Dublin, is the coroner for the city of Dublin.

July 16th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

Chronic Poisoning by Coffee.

DR. GILLES DE LA TOURETTE[1] has rendered useful service by reminding the profession of the possibility of toxic symptoms following the inordinate ingestion of coffee. No mention is made of this danger in standard works on medicine. Taking into account, however, the growing popularity of coffee drinking amongst the "upper ten" and their close imitators "the middle million," it is important that a habit which in moderation is in nowise hurtful, but in excess may act as a disturbing factor, should be strictly regulated. Dr. Gilles de la Tourette tells us that chronic coffee poisoning is almost always mistaken for the troubles engendered by the abuse of alcohol. In both cases the stomach and the nervous system bear the brunt of the attack. In effect, caffeic and alcoholic gastritis are nearly identical as to their symptoms—morning vomiting of glairy mucus (*pituites*), pain in the pit of the stomach, thickly-coated tongue, and loss of appetite. The disgust excited by even the idea of solid food is such that these patients eat nothing else but bread soaked in their poison—coffee. There supervene then nausea, vomiting, and painful acid eructations, and

[1] Société Médicale des Hôpitaux, July 5th.

the sufferer finally becomes a victim to caffeic cachexia. The circulatory system becomes in its turn attacked, the pulse being slowed to a marked extent. Insomnia is common, and if sleep persist it is disturbed by dreams of a terrifying or professional nature recalling the nervous disturbance met with in alcoholism. The resemblance is rendered closer by the existence of marked tremor of the muscles of both extremities, and a fibrillar trembling of the tongue muscles, which may extend to the facial muscles. Cramps, often very painful, of the thigh and calf muscles are frequently noted. In certain patients sensibility is diminished, but the reflexes generally remain normal. Paralyses have not yet been seen. The above-mentioned symptoms are not persistent, the suppression of coffee sufficing to bring about their prompt disappearance. It would seem that elimination was in this case more rapid than in the case of alcohol, for suppression is followed by improvement more quickly in one instance than in the other. The abuse of coffee by children has in several instances determined an arrest of development. It is not often that children make an immoderate use of coffee in England, but the same cannot certainly be said of tea, the alkaloid of which is identical with that of coffee. English parents would do well to restrict the supply of tea to children. Neglect of this rule is, I suspect, responsible for many digestive and nervous troubles, the origin of which is vainly sought by the puzzled family medical attendant.

The President of the Republic at the Hôtel-Dieu.

M. Félix Faure has signalised his tenure of office by frequent visits to the Paris hospitals, where his affability has rendered him most popular amongst both patients and students. His stature has, during these friendly visits, generally sufficed to single him out when surrounded by our *confrères*. A few weeks ago, however, when visiting the St. Louis Hospital he had to "take a back seat" in this respect, for he was accompanied by the tallest of French hospital surgeons, M. Marchand, and their appearance side by side was greeted by an amused laugh. On Thursday last the popular Chief of the State inspected the wards of the Hôtel-Dieu and afterwards addressed the entire *personnel* in the courtyard in the following terms :—

"Je ne veux pas quitter l'Hôtel-Dieu sans remercier les chefs de service, les savants médecins, les internes, les sœurs, les infirmiers, tous ceux, en un mot, qui se dévouent, dans cette maison de la souffrance, au service des malheureux. Vous avez pu voir que je m'informe fréquemment, auprès des malades, de leur état et des soins qui leur sont donnés. Ils sont unanimes à reconnaître les délicates attentions dont vous les entourez. Je suis heureux de me faire leur organe et de vous remercier tous, en leur nom et au nom de la patrie. Comme chef de l'État, je tiens à vous dire combien vos services sont appréciés, combien nous vous en sommes reconnaissants. J'ai voulu venir à l'Hôtel-Dieu à la veille de notre fête nationale, parce qu'il me semble que d'ici je m'adresse à tout le corps médical de Paris et que le lieu était bien choisi pour remettre les récompenses accordées à l'occasion du 14 juillet. Vos médecins recevront leurs décorations dans cette maison, dans ce jardin, comme des soldats reçoivent le ruban sur le champ de bataille, comme des chefs au milieu de leurs troupes."

He then affixed to the coat of Professor Tillaux the Cross of Commander of the Legion of Honour, and handed the Cross of Officer of the same Order to Dr. Nicaise, surgeon of Laënnec Hospital, and Dr. Constantin Paul, physician to the Charité Hospital. On Dr. Deleus, surgeon to the Lariboisière Hospital, Dr. Ferrand, physician to the Hôtel-Dieu, Dr. Landrieux, physician to Lariboisière Hospital, and Dr. Kirmisson, surgeon to the Hospice des Enfants Assistés, he conferred the Cross of Chevalier of the Order. The President did not forget the more humble contributors to the relief of human suffering, for he distributed amongst several nurses silver and bronze medals. The interesting ceremony ended by a vote of thanks to M. Félix Faure, proposed by Dr. Peyron, director of the Assistance Publique.

Price of Tobacco to Hospital Patients.

The Minister of Finance has just decreed that the fragrant weed shall be supplied to the in-patients of French hospitals at the under-mentioned rate :—

Tobacco for smoking purposes,	1½ franc the kilogramme.
" " snuff	ditto.
" " chewing	2 francs the kilogramme.

We may well echo the expression of surprise uttered by the *Bulletin Médicale* at the toleration of chewing in the wards of hospitals, such a disgusting practice being obviously incompatible with the maintenance of that state of cleanliness that should obtain in all nosocomial establishments.

A Sign of the Times.

The *Union Médicale* informs us that it is the intention of the *Assistance Publique* to provide at each Paris hospital for the convenience of students accommodation for the storing of bicycles. If the current continues in the same direction we may soon expect to see hospital physicians and surgeons alight at the doors of these establishments not from their carriages, as at present, but from their cycles.

The French Army.

Of 320,043 young men called upon to serve in the army in 1894, 26 081 were declared unfit for service. During the same year 365 soldiers were discharged because of maladies or infirmities contracted during their term of service, whilst no fewer than 11,807 were in like manner discharged on account of ailments having no connexion with the exigencies of their military duties.

July 16th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

A Blind Graduate.

AN incident not less touching than interesting occurred at the graduation ceremony held the other day at the Istituto di Studi Superiori in Florence. A young gentleman, Signor Luigi Ansaldi, of Rocca Scrivia, blind from birth, took his degree in the department of Literature and Philosophy, after a brilliant course of study in which he won the admiration and esteem of teachers and class-fellows alike. His graduation thesis was a kind *apologia propriâ suâ* entitled "Compensazioni dei Sensi nei Ciechi" (Compensations in the Senses of the Blind). It was an acute and well-thought-out monograph conveyed in excellent style, and was pronounced by the "Commissione di Professori" (examining professors) to be an important contribution to the methods already in use for aiding the moral and intellectual culture of the blind. In fact, on the motion of his Excellency Signor Pasquale Villari, sometime Minister of Public Instruction (the well-known author of the "Lives of Machiavelli and Savonarola"), it was recommended by the Istituto di Studi Superiori for the honour of publication. One of the medical faculty said of it: "È lavoro fisico psicologico di grande importanza e affatto nuovo" (It is a physico-psychological work of great importance and quite original). Needless to say that Signor Ansaldi received an "ovation" from his class-fellows of all faculties as well as from the general public.

Heat and Snake-bite.

The excessive heat prevailing these last few weeks throughout the kingdom has had one remarkable effect—to increase the virulence of snake-bite and the mortality thence arising. This is a very common lesion in Italy, where so many of the agricultural poor are employed in the *macchia*, or tracts of stunted forest growth, mainly in gathering fuel for the charcoal burners. As a rule the vipers with which these places abound are not deadly—at least, the wounds they inflict are nearly always susceptible of a few days' cure in the local hospital. With the intense heat, however, that since the middle of last month has made itself felt throughout the peninsula a distinct exacerbation of the lesion has declared itself, and cases of death have been so common, particularly in the Alta Italia, as to engage the serious attention of practitioners. On the 13th inst. (I hear from Brescia) a youth of fifteen was bitten on the foot by a viper at Lumezzano, and in a few hours the familiar symptoms of virulent snake-bite (swelling, pain, and ultimately coma) developed themselves, and he died in violent convulsions—all medical aid notwithstanding.

The Sale of Mushrooms.

Poisoning of another kind, still more frequent, is that from the use of mushrooms, particularly those which, in the dry state, are hawked about by the so-called "vivenditori ambulanti." A municipal edict has just been issued to check this constantly recurring calamity at its source, and accordingly fresh mushrooms are allowed to be brought into the city only at certain fixed hours and at certain gates, where sanitary inspection is at once put in practice on them. Even after their being passed as belonging to the edible kind, the mushrooms thence consigned to the dealers' stores are once more subjected to expert examination, and their sale is limited to certain officially permitted quarters—that is, where the sanitary authority has stations. Hawking them about in the thoroughfares and by-streets is a penal offence.

Indeed, the sale of them is allowed only by special licence. This is a most salutary regulation, to be applied (let us hope) to other articles of food hardly less dangerous when vended by irresponsible dealers.

July 16th

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

Female Physicians and Pharmaceutists.

SOME weeks ago Miss Possaner, a lady who graduated in medicine at Geneva and is at present practising as "hospitant" in the obstetrical clinic of Professor Schanta, petitioned the Austrian Ministry for permission to practise in Vienna. Her request was refused, but, on the other hand, Mrs. Kerschbaumer was allowed some years ago to establish an ophthalmological home in Salzburg, where she carries on a practice in partnership with her husband, who is a physician. Several women have also received appointments as physicians in Bosnia, where the female portion of the population decline to be examined by a medical man. Although, according to the new sanitary law, every municipality is obliged to pay a fixed salary, complaints of the dearth of medical men are nevertheless made in some districts, because not every physician is willing to settle down in a dull country life, where he is surrounded by rustic prejudices and where his annual income hardly exceeds £80. The admission of women to medical practice is, therefore, an urgent necessity. The Hungarian Ministry is inclined to appoint women as pharmaceutists, and the majority of the pharmaceutical profession is in no way opposed to the innovation, for the new regulations as to study have caused a great want of assistants in this country.

Legal Penalties for Medical Negligence.

The Vienna Medical Chamber at the present moment has the following question under its consideration. A poor law medical officer having been called to see a man who had fallen ill with gastric symptoms he diagnosed acute alcoholism without making any examination, and prescribed soda-water with cold cataplasms. The condition of the patient became worse and another practitioner who was sent for found him unconscious and apparently in a fit of apoplexy. The patient died, and a charge of causing bodily harm was brought against the original medical attendant, in accordance with paragraph 431 of the Penal Law. The expert who gave evidence explained that although a careful examination might not have led to a different diagnosis, there was, in his opinion, a neglect of duty, for the poor law medical officer had not fulfilled his obligation of trying to find out the cause of the illness. The accused was fined £5 with twenty hours' imprisonment, a sentence which was confirmed by the Court of Appeal. By this decision the court declared that the neglect of examination had caused no injury to the patient, but that the medical officer ought to have known that his conduct might endanger life. This result has caused a great sensation throughout the profession of medicine, for it throws serious obstacles in the way of medical treatment. Who would perform a surgical operation if the above-quoted paragraph be interpreted in this manner? Every operative procedure exposes the patient to danger, and the surgeon will have to justify himself even in the cases where operations are successful. The law punishes the infliction of bodily injury by a medical man's ignorance or negligence, but does not punish the endangering of the patient's life or health when caused either by medical treatment or by neglect. The Medical Chamber has taken up this question, and at the last meeting a member brought in a motion referring to the provisions of the law as regards offences committed by medical men. Paragraph 431 is inapplicable hereto, for it imposes penalties amounting to £40 fine or three months' imprisonment, whereas paragraph 358 imposes only a fine of £40 in the case of actual injury or death due to neglect. The Chamber adopted this motion and will take steps to defend the profession against decisions which are not in conformity with the spirit of the law.

Loretin.

Dr. Trnka has published in the *Wiener Medicinische Wochenschrift* a paper on the utility of loretin in surgical practice. It is an inodorous, sulphur-coloured, mealy powder, producing neither local nor general toxic effects. It is employed instead of iodoform, for it causes but trifling granulation, limits secretion, and is also cheaper than iodoform. A compound of equal parts of loretin and calcined magnesia is well adapted for favouring primary healing of wounds; a solution of five parts of loretin with two parts of tragacanth and glycerine in one hundred parts of water possesses the same quality as collodion of depositing a filmy coating.

Professor Hering.

In Professor Hering, who has been elected successor to the late Professor Ludwig, the German University of Prague loses one of its best known members, and Austria its most able physiologist. I need mention only his ingenious theory of colours wherein he explained that the action of seeing is an expression for a tissue change in the visual purple, his experiments on anomalous contraction, and his interesting objections against the psycho-physical law of Fechner. He felt himself slighted because he did not succeed in obtaining the object of his ambition—the chair of the late Professor Brücke. At that time the Government gave him fair hopes of being appointed to a second chair of Physiology which was to be established in Vienna. Professor Hering and the late Professor Fleischl have been the most celebrated followers of the far-famed Brücke, to whom physiology owes so much.

July 14th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Cholera in the Quarantine Camp.

SOME special Providence seems to have averted an explosion of cholera in the Holy Places, and we no longer hear of the dropping cases which preceded the feast days. Dr. Gauthier is now in charge of the pathological and bacteriological investigations into the sick and dead at the Tor quarantine camp, and it would seem from his reports that matters have been placed upon a more scientific basis than in former years. He reports on June 18th that he has made bacteriological researches in the case of eighteen suspected hospital patients suffering from diarrhœa, but that in every instance the result was negative. Fortunately, now, however, it is the rule, and not the exception, to conduct necropsies, and by this means two cases of certain cholera were found, though there is no record of these two men having been under any medical treatment before death. Both men came from the same steamer. The more typical case of the two showed great sinking in of the eyes without emaciation, intense congestion of the abdominal contents, enlarged liver and spleen, with bladder retracted behind the pubes and containing no urine. The stomach and small and large intestines were full of liquid holding white flakes in suspension, and this liquid eventually showed under the microscope rods, micrococci, staphylococci, and eventually comma bacilli upon all the cultures of peptone.

The Origin of Massage.

An annotation in THE LANCET of June 22nd invites search for the derivation of this word and the origin of the custom. At present I think we can hardly do better than accept the Greek μάσσειν, to knead, connected with the Sanskrit *mach*, to pound. The only Arabic word in Turkey or Egypt for massage after the bath or elsewhere is *takbees*, from the root *kubas*. There is an Arabic word *mus'h*, but it means to wipe away dust, and is never used for rubbing or kneading. Lastly, the operation of cracking the bather's joints, which occurs after the hot bath and before the muscles are kneaded, is called *tuck tuckah*. Medical rubbing has been used in Egypt for centuries, but whether before Roman times I do not know. Among the curiosities of Old Cairo are occasionally found stones which were used for massage. Visitors to Pompeii will call to mind a picture in the bath of a person undergoing massage, and readers of Cicero may remember his friend Asclepiades of Bithynia, who, after having learnt his profession at Alexandria under the best teachers of the day, settled in Rome in the beginning of the first century B.C.,

and there introduced into medical practice both hydrotherapeutics and massage.

The Tourah Prison.

The chief prison in Egypt for male hard labour convicts is at Tourah, about eight miles south of Cairo, where the adjacent quarries, which once furnished limestone to the builders of the Great Pyramids, supply unlimited scope for labour six days a week. There are 950 convicts, and though 100 of them are "lifers," there are others whose term is only for six months. Strict discipline is maintained by sixty-five warders who are unarmed and do not carry even a stick or whip; but by night there are nine sentries and by day there are four, who patrol the roof and the outside of the prison, and who know how to use their loaded rifles with deadly aim. These sentries are blacks from the Equatorial provinces, and have prevented more than one attempted escape. Nearly all the convicts are natives of Egypt, the blacks only supplying five per thousand and the Nubians averaging only two per thousand. Any extra bad characters among the convicts, such as the ringleaders of attempted revolt or escape, are locked up at night in solitary cells to lessen their chances of contaminating their fellows. As a whole the convicts are by no means of a ruffianly type and their physiognomies are very like those of the ordinary peasant. In this country, where crime is at such a minimum and where even the lunatics are as quiet as sheep, it is not too much to hope that education and improved environment may one day do much to improve the lot of the townsfolk from whom the convicts are mostly drawn. The "ticket-of-leave" system has not yet been introduced into Egypt, and would certainly be worth a trial, for at present there is very little incentive to well-conducted convicts to lead a peaceful, hard-working life within the prison bounds. Every visitor cannot fail to be struck with the very healthy, well-fed appearance of the prisoners, and on inquiry I was told that there were only fourteen on the sick-list. The regulation space for the dormitories is a little over 700 cubic feet. A hospital consisting of two separate pavilions has just been built near the prison containing accommodation for twenty-four ordinary sick and forty infectious cases. Tourah prison went through a sad experience some years ago when its inmates were ravaged by typhus and relapsing fevers, and the remembrance of this epidemic has doubtless occasioned the remodelling of the cells and the present very satisfactory condition of the convicts. One man was pointed out to me as having killed his father, mother, wife, and children, and it might be easy to prove that he was suffering from homicidal mania, but we are not yet civilised enough to have a home for the criminal insane, and I doubt if he could be more profitably employed than in hewing stone and drawing water under medical supervision.

Detection of Criminals.

In Alexandria a special staff of European constables is being trained to apply the Bertillon method to prisoners, and so far good reports have been received. It may, perhaps, be doubted whether the Egyptian is a sufficiently accurate individual to profit by a careful series of measurements. On the other hand, it must not be forgotten that photographs of criminals are useless for the untrained eye of the native policeman.

Hospital for Infectious Diseases.

The first hospital devoted entirely to the treatment of infectious disease is now in full working order in the Abbassiyeh Desert, near Cairo, and is a natural development of the tents which have been in use until this year. The ground consists of several acres of desert, levelled and walled in, and roads to it are now being made by a gang of chronic lunatics from the neighbouring asylum. There are five detached buildings on the pavilion system for typhus fever, small-pox, disinfection, necropsies, &c. There are twenty-six beds and unlimited space for tents if that number should be exceeded. The disinfecting block is under the charge of a German engineer, who lives on the spot with the native doctor. Infectious clothing is submitted to dry heat (230° F.) for three hours in two stoves, and a bath-room and douche for the attendants have not been forgotten. The laundry is fitted up with English machines, and the store-rooms are a model of neatness and complete in every respect. The young native house physician is just recovering from an attack of typhus fever.

Cairo, July 1st.

Obituary.

CORNELIUS S. HALL, M.R.C.S. ENG., L.S.A.

THE death is announced, at his residence in Carlisle, on July 6th, of Mr. Cornelius S. Hall, one of the oldest practitioners in that city and one holding many appointments. After being "apprenticed" to a country practitioner he studied at the London Hospital, and during his course was one of the medical visitors appointed by Government in the cholera plague of 1854. He then volunteered for service in the Crimea, where he had for one "chum" the present surgeon to the Queen in Scotland, Dr. Patrick Heron Watson. On his return to England he spent eighteen months in Manchester, whence he moved to Carlisle, where he at once obtained an appointment at the Dispensary and Fever Hospital. In 1862 he became factory surgeon, in 1864 medical officer to the workhouse hospital, in 1875 medical officer to the Carlisle rural district authority, and in 1888 surgeon to the Police Force. He always took a great interest in Volunteer movements, and attained the rank of brigade-surgeon-lieutenant-colonel. Of scientific subjects he was especially fond, botany, geology, meteorology, and microscopy being special hobbies. He was president of the Carlisle Microscopical Society for many years, and Fellow of the Royal Microscopical Society. His papers on the Treatment and Burial of the Dead; Noise, Silence, and Sound; Pasteur and his Work, &c., were of great interest and were quoted by newspapers all over the country. Workhouse nursing was a subject needing special reformation, and into this he threw his whole heart. A paper on Workhouse Nursing was eagerly sought by many interested in the work and gave quite an impetus to hospital nursing. He was a man of wide sympathies and liberal-minded in all things. As a worker he was enthusiastic and accurate; no trouble was too great. He was universally respected and beloved, and his death will make a void not easily filled.

WILLIAM CROUDSON BARNISH, M.R.C.S. ENG., L.S.A.,

MEDICAL OFFICER OF HEALTH, WIGAN.

ON June 27th the profession lost a noble member and Wigan an efficient, courteous, discriminating, and obliging health officer. William Croudson Barnish was an excellent type of general practitioner and one who was able to discharge his duties as health officer without friction with his brother practitioners or clashing in an unreasonable way with his patients. Mr. Barnish in early life assisted his father, who was a chemist in the town; but his love of chemistry and natural science led him, on the advice of his brother-in-law (the late Dr. Birkenhead, who was afterwards Professor of Chemistry in the Liverpool School), to study medicine. He accordingly entered at the Manchester School of Medicine and qualified as M.R.C.S. Eng. and L.S.A. in 1868. After holding a couple of house surgeoncies he joined the late Mr. Fisher, who had an extensive surgical practice in Wigan, and the partnership lasted till Mr. Fisher's death some years ago. For twenty-five years Mr. Barnish was medical officer of health for Wigan. He was a genuine health officer, and numerous are the improvements which he has effected. Several epidemics of small-pox, typhus fever, and typhoid fever he was able to combat, and during the past ten years effected many changes, such as the abolition of the old small-pox hospital and the building of a new sanatorium, which is a model for a town of the size of Wigan. At the time of his death he was senior honorary medical officer to the Royal Albert Edward Infirmary, and the governors, to mark their sense of appreciation, two years ago made him one of its vice-presidents. He also gave numerous ambulance lectures to various classes, and latterly acted as examiner. Mr. Barnish was beloved by his patients and by all with whom he came in contact. This year in March he contracted influenza, which he appeared not to be able to throw off, and although he kept to his work up to within two months of his death his friends could see he had not his usual vivacity. Yet without murmur he stuck to his post till rest was absolutely necessary, and he was ordered away for a time, but this brought no relief to the cardiac failure from which he suffered; he returned

home without improvement, bore his affliction manfully, and passed quietly away on the date above mentioned at the age of fifty-five years, leaving a sorrowing widow and six children to mourn their loss. He was interred in the family vault at the Wigan Parish Church on July 1st, the funeral being attended by his relatives, professional brethren, and members of the Sanitary Committee, of the Corporation, and of the Infirmary Board of Management.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. Elias Rodriguez, Professor of Therapeutics and Forensic Medicine in Carácas; and Dr. José Maria Teixeira, Professor of Pharmacology and Therapeutics in the University of Rio de Janeiro.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen were, at the quarterly meeting of the Council on Thursday, July 11th, elected to the various offices for the ensuing collegiate year:—

Hunterian Professors.—Charles Steward, Conservator of the College Museum, M.R.C.S. Eng. (St. Thomas's Hospital); subject of lecture not stated.—John Alfred Coutts, M.B. Cantab., M.R.C.S. Eng., (St. George's Hospital), on Infantile Syphilis.—Leonard Erskine Hill, M.B. Lond., M.R.C.S. Eng. (University College Hospital), on Cerebral Pressure and the Cerebral Circulation.

Arris and Gale Lecturer.—Ernest Henry Starling, M.D. & B.S. Lond., M.R.C.S. Eng. (Guy's Hospital), on the Physiological Causation of Dropsy.

Erasmus Wilson Lecturer.—Walter George Spencer, F.R.C.S.Eng., M.B. and B.S. Lond. (Westminster Hospital), on the General Pathology of Bone.

Pathological Curator.—James Henry Targett, F.R.C.S. Eng., M.B., B.S. and M.S. Lond. (Guy's Hospital), re-elected.

Anatomical Assistant in the Museum.—Richard Higgins Burne, B.A. Oxon., re-elected.

FOREIGN UNIVERSITY INTELLIGENCE.—*Bonn:* Professor Mikulicz of Breslau, who was invited to succeed Professor Trendelenburg in the Chair of Surgery, having declined to migrate, the post has been offered to Dr. Schede, director of the Surgical Side of the Eppendorf General Hospital, Hamburg.—*Tubingen:* Dr. Henke, Professor of Anatomy and Director of the Anatomical Institute, is retiring. Professor Curtius of Kiel has been appointed to the Chair of Chemistry, in succession to Dr. Lothar von Meyer.

DR. D. H. ATTFIELD, M.A. Cantab., English Quarantine Medical Officer of the Egyptian Government at Suez, who last year during the Mecca Pilgrimage months filled the post of subdirector of the quarantine camp at El Tor, has this year, during the similar period, been appointed the chief director of the extra Egyptian Camp at Ras Mallap. Dr. Attfield is the son of Professor Attfield, the editor of the British Pharmacopœia.

ROYAL COLLEGE OF SURGEONS IN IRELAND—Prize List, Summer Session, 1895:—The Barker Anatomical Prizes: N. H. Alcock and C. J. Patten (equal), £26 5*s.* each; W. J. Sweeny, special prize, £15 15*s.* The Carmichael Scholarship: F. J. Palmer, £15. The Theory and Practice of Surgery: L. McDowell, gold medal; G. A. Robinson, silver medal; Miss C. L. Williams, certificate. Practical Histology: D. Hadden, first prize; H. Hall, second prize. Practical Chemistry: P. A. Frazer, first prize; C. C. Meck and W. J. Anglim (equal), second prizes. Public Health and Forensic Medicine: A. I. Eades, first prize; Miss C. L. Williams, second prize. Materia Medica: R. H. D. Pope, first prize; G. R. McDonald, second prize. Practical Pharmacy: S. R. Godkin, first prize; M. Gavin, second prize. Biology: M. Gavin, first prize; W. McLorinan and W. J. Anglim (equal), second prizes. The preliminary Examination for the commencement of medical study of the Royal Colleges of Physicians and Surgeons in Ireland for sessions 1895-96 will be held on Tuesday and Wednesday, Oct. 1st and 2nd, 1895. Prospectuses can be had on application.

BOOKS ETC. RECEIVED.

BALE, J. & SONS, Great Titchfield-street, Oxford street, London, W.
Early Scoliosis, or Curable Curvatures of the Spine. By Percy G. Lewis, M.D., M.R.C.S. 1895. pp. 49. Price 2*s.* 6*d.*

BROGGERS, A. W., Kristiania.
Festskrift i Anledning af professor; Doctor medicine Hjalmar Heibergs; 25 Aars Jubilæum som professor ved Kristiania Universitet Fra forhenværende og nuværende Assisteuter. 24 de Mai, 1895. pp. 270.

CASSELL & COMPANY, London, E.C.
A System of Surgery. Edited by Frederick Treves, F.R.C.S. Vol. I. Illustrated. 1895. pp. 1152.

CHURCHILL, J. & A., New Burlington-street, London, W.
Chemistry of Urine. By Alfred H. Allen, F.I.C., F.C.S. 1895. pp. 212. Price 7*s.* 6*d.*
The Conditions of Radical Cure in Cancer. By Herbert Snow, M.D. Lond.; reprinted papers. 1895. pp. 63. Price 2*s.* 6*d.*

EDWARDS & DOCKER CO., Philadelphia.
Skiascopy and its Practical Application to the Study of Refraction. By Edward Jackson, A.M., M.D. Illustrated. 1895. pp. 112.

FISCHER, GUSTAV, Jena.
Lehrbuch der Allgemeinen Pathologie und der Pathologischen Anatomie. Von Dr. Ernest Ziegler. 8 Auflage. 1895. pp. 1025.

GRIFFIN, CHARLES, & Co., Exeter street, Strand, London, W.C.
Poisons: Their Effects and Detection. By Alexander W. Blyth, M.R.C.S., F.I.C. Third Edition. Illustrated. 1895. pp. 724. Price 21*s.*
A Medical and Surgical Help. By William J. Smith, F.R.C.S. Illustrated. 1895. pp. 333. Price 6*s.*

HEINEMANN, WM., Bedford-street, London, W.C.
Conventional Lies of our Civilisation. By Max Nordau. Translated from the seventh edition of the German Work. Second edition. 1895. pp. 346. Price 17*s.* net.

LEA BROTHERS & Co., Philadelphia.
Remote Consequences of Injuries of Nerves and their Treatment. By J. K. Mitchell, M.D. 1895. pp. 245.

LEHMANN, J. F., Munchen.
Atlas des Gesunden und Kranken Nervensystems. Von C. Jakob. 1895.

MACMILLAN & Co., Bedford-street, London, W.C.
The Theory and Practice of Counter-irritation. By H. Cameron Gillies, M.D. 1895. pp. 236. Price 6*s.* net.

SWEET & MAXWELL, Chancery-lane, London, E.C.
The Law of Copyright in Designs. By L. Edmunds, D.Sc., L.L.B. assisted by T. M. Stevens, M.A., B.C.L., and M. W. Slade, B.A. 1895. pp. 291.

SWAN SONNENSCHEIN & Co., Paternoster-square, London, E.C.
Microbes and Disease Demons. By Edward Berdoe, L.R.C.P. Edin., M.R.C.S. 1895. pp. 93. Price 1*s.*
Nature *versus* Natural Selection: An Essay on Organic Evolution. By Charles C. Coe. 1895. pp. 591.
The Climates of the Geological Past, and their Relation to the Evolution of the Sun. By Eug. Dubois. 1895. pp. 167. Price 3*s.* 6*d.*

THACKER & Co., Newgate-street, London, E.C.
A Guide to Hindustani. By G. S. A. Ranking, B.A., M.D., Cantab. Third edition. 1895. pp. 246.

The Mystery of Ourselves; or Soul and Body; by Chillingham Hunt (Dean & Son, 160A, Fleet-street, London, E.C.); price 1*s.*—The New Treatment of Gout by Pitkeathly cum Lithia; written by an M.D. (Reid & Donald, George-street, Perth, 1895); price 1*s.*—Catechism Series: Surgery; Part I. (E. and S. Livingstone, Edinburgh); price 1*s.* net.—A Report on Salophen; by B. H. Waters, A.M., M.D. (reprint from the New York Medical Journal for May, 1895).—A German-English Medical Thesaurus; by Rev. H. Losch, M.D. (published by the Author, Philadelphia, Pa., 1895).—Manuel de Gymnastique; par A. G. Fontana (Société d'Éditions Scientifiques, Paris, 1895).—Science Progress; July, 1895 (the Scientific Press, 428, Strand, London, W.C.).—Report for 1894 on the Progress of Pharmacy in its Relation to the Future Revision of the "British Pharmacopœia," 1885; by J. Attfield, Ph.D., F.R.S. (Spottiswoode & Co., New-street-square, London, 1895).—The Sick Poor in Workhouses; by Ernest Hart, D.C.L.; second series (Smith, Elder, & Co., Waterloo-place, London, 1895).—Biographical Sketch of John Reid, surgeon, Glasgow, in whose memory was founded the "John Reid Prize," open to all Medical Students of Glasgow; by John Lindsay Steven, M.D. (A. MacDougall, Glasgow); 1895.—Report of 145 Operations done for the Removal of Ovarian Tumours and Pathological Conditions associated with the Ovaries and Uterine Appendages only; by A. Van der Veer, M.D.; reprint (C. F. Williams, Albany, New York); 1895.—National Righteousness: Letter from the Representative Board of the Anti-Opium Societies; July, 1895 (Morgan & Scott, London); price 2*d.*—The Natural History of Plants; Part XIV. (Blackie & Son, Old Bailey, London); price 2*s.* 6*d.* net.—Sir Henry Irving: a Record of Over Twenty Years at the Lyceum; by Percy Fitzgerald, M.A.; new edition (Chatto & Windus, Piccadilly, London; 1895); pp. 149.—Nursing in a Nutshell; by a Doctor of Medicine (Iliffe & Son, St. Bride-street, London, E.C.); price 6*d.*—The Truth

about Vaccination, being a Report on Vaccination as a Branch of Preventive Medicine; by Ernest Hart, D.C.L.; second edition (Smith, Elder & Co., Waterloo-place, London); 1895.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

BISS, C. Y., M.D. Cantab., F.R.C.P. Lond., M.R.C.S., has been appointed Physician to the Hospital for Consumption, Brompton.

BRINDLEY, ALBERT E., M.D. Lond., M.B., Ch.B., B.Sc. Vict., has been appointed Resident Medical Officer to the Manchester Royal Infirmary, vice Brockbank, resigned.

BUNCOMBE, WM. DAVEY, L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Medical Superintendent of the City of London Infirmary, Bow, vice C. H. Buncombe, resigned.

BUTLER, T. H., M.B. Oxon., L.R.C.P., M.R.C.S., has been appointed Resident Medical Officer to the Royal Free Hospital, Gray's-inn-road.

DRAKE, A. T., M.B., L.R.C.S., L.M. Irel., has been reappointed Medical Officer for the No. 4 Sanitary District of the Greenwich Union.

EGERTON, W. A. H., L.R.C.S., L.M. Irel., has been appointed Assistant Medical Officer to the Board of Guardians, Chelsea.

GAYLOR, EDWD., L.R.C.P., L.M. Edin., L.F.P.S. Glasg., has been appointed Medical Officer to the Ripley Urban District Council.

GIDLEY, GUSTAVUS GEORGE, M.R.C.S. Eng., L.R.C.P. Lond., L.S.A., has been appointed Medical Officer and Public Vaccinator for the Cullompton and Butterleigh and Kentisbeare and Blackboro' Districts of the Tiverton Union, vice Lloyd, resigned.

GOODING, ANGLO, L.R.C.P., M.R.C.S., has been appointed House Surgeon to the London Hospital.

HARPER, H. C., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health, for the Thedwastre Rural Sanitary District.

HICHENS, F., M.D. Lond., M.R.C.S., has been reappointed Medical Officer of Health for the Redruth Urban Sanitary District.

KITE, EDWIN W. D., M.B., M.R.C.S., L.S.A., has been appointed Factory Surgeon to the Oulerton District, Sheffield, vice Payne, resigned.

LATHAM, HENRY, M.B., C.M. Edin., has been appointed House Surgeon to the Stockport Infirmary.

LODGE, G. H., L.R.C.P., L.M., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Assistant House Surgeon to the Rotherham Hospital and Dispensary.

MILLSON, G., L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer of Health for Newington.

MUDGE, Z. B., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer to the Phillack Urban District Council.

NEVETT, ALFRED J., L.R.C.P., L.R.C.S. Edin., has been appointed Junior Assistant House Surgeon to the Stockport Infirmary.

STUART, J. A. ERSKINE, L.R.C.P. Edin., L.R.C.S. Edin., has been appointed Medical Officer of Health for the Borough of Batley, vice Swann, deceased.

THOMSON, SAMUEL W., M.B., Ch.B. Univ. Vict., has been appointed Visiting Surgeon to the Stockport Infirmary.

WHITAKER, J. RYLAND, B.A., M.B. Lond., F.R.C.P. Edin., L.R.C.S. Edin., has been elected Lecturer on Anatomy at Surgeons' Hall School of Medicine, Edinburgh, vice Macdonald Brown, resigned.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

ANCOATS HOSPITAL, Manchester.—Resident Junior House Surgeon. Salary £60, with board and washing.

BOROUGH OF LOWESTOFT.—Medical Officer of Health and Medical Attendant at the Sanatorium for the Urban and Port Sanitary Districts of Lowestoft. Salary for the Urban Sanitary District £160 per annum, for the Port Sanitary District £20 per annum, and as Medical Attendant at the Sanatorium, £30 per annum. Applications to the Town Clerk, Lowestoft.

CHILDREN'S HOSPITAL, Nottingham.—House Surgeon (non-resident), for six months. Salary at the rate of £100 per annum.

COUNTY BOROUGH OF WEST HAM.—Resident Medical Superintendent for the Borough Hospital for Infectious Diseases at Plaistow. Salary £200 per annum, with annual increments of £10 up to a maximum of £250, and apartments and washing. Applications to the Town Clerk, Town Hall, West Ham, E.

GRAVESEND HOSPITAL.—House Surgeon. Salary £80 per annum, with board and residence.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—Junior House Surgeon for six months. Board, lodging, and laundry in the hospital provided.

HOSPITAL FOR WOMEN, Soho-square, London.—Assistant House Physician, non-resident, for three months.

MIDHURST UNION, Sussex.—Medical Officer for the Union Workhouse, situate at Eastbourne, near Midhurst. Salary £20 per annum, with extra fees for Midwifery cases. Applications to the Clerk, Midhurst.

MORPETH DISPENSARY.—House Surgeon, unmarried. Salary £120 per annum, with furnished house, coals, and gas. Applications to Mr. N. J. Wright, Morpeth, Northumberland.

PADDINGTON-GREEN CHILDREN'S HOSPITAL, London, W.—Assistant House Surgeon. Board and residence provided.

PARISH OF CAMBERWELL, London.—Assistant Medical Officer and Second Assistant Medical Officer for the Infirmary at Havil-street, Camberwell. Salary of the Assistant Medical Officer at the rate of £120 per annum, increasing £10 annually to £150, with apartments, board, and washing; and that of the Second Assistant Medical Officer £50 per annum, with the same allowances. The latter appointment for one year only. Applications to the Clerk to the Guardians, 27, Peckham-road, S.E.

ROYAL ORTHOPAEDIC HOSPITAL, 297, Oxford-street, London.—Resident House Surgeon, unmarried. Salary £100 per annum, with partial board.

SALFORD UNION INFIRMARY, Hope, near Eccles.—Assistant Medical Officer. Salary £130 per annum, with furnished apartments in the Infirmary. Applications to the Clerk to the Guardians, Union Offices, Eccles New-road, Salford.

UNIVERSITY OF GLASGOW.—Lectureship on Surgery and Clinical Surgery at Queen Margaret College for one year. Salary £100 per annum.

UNIVERSITY OF GLASGOW.—Two Examiners in Medicine.

YORK DISPENSARY.—Resident Obstetric House Surgeon, unmarried. To attend midwifery cases at their own homes. Salary £150 per year, with furnished apartments, coals and gas.

Births, Marriages, and Deaths.

BIRTHS.

GRAY.—On July 8th, at Lansdowne House, Essex-road, London, N., the wife of Thomas Underwood Gray, L.R.C.P. Lond., M.R.C.S. Eng., of a daughter.

HARFORD-BATTERSBY.—On July 14th, at Earlham-grove, Forest-gate, E., the wife of Charles F. Harford-Battersby, M.A., M.D. Camb., of a daughter.

HIND.—On July 9th, at 60, New-street, Jersey, the wife of Alfred E. Hind, F.R.C.S. of a son.

OWEN.—On July 10th, at Hampton-on-Thames, the wife of Arthur Deaker Owen, M.R.C.S., L.R.C.P. Lond., of a son.

RENDALL.—On July 7th, at Aix-les-Bains, the wife of Stanley Rendall, M.D. Paris, M.B. Edin., M.R.C.S. Eng., of a son.

TWEED.—On July 10th, at Upper Brook-street, Grosvenor-square, the wife of Reginald Tweed, M.D., of a son.

MARRIAGES.

BARNES—SMITH-GORDON.—At St. Andrew's, the Parish Church, Charmouth, Dorset, George Barnes, L.R.C.P. Edin., of Castle Hill House, Axminster, to Charlotte Maria, second surviving daughter of Sir Lionel Smith-Gordon, Bart., of Fern Hill, Charmouth.

COX—YELD.—On July 8th, at the Parish Church of St. Mary, Stockport, William Alfred Spencer Cox, M.R.C.S. Eng., of Sheffield-gardens, Campden-hill, W., to Florence Lucy, eldest daughter of the late William Walter Yeld, of Churchgate-house, Stockport.

DALTON—MOSSE.—On July 11th, at the church of St. Mary-the-Less, Cambridge, James Henry Cheshyre Dalton, M.D., Trinity College, Cambridge, to Alice Tenison, elder daughter of the late Rev. S. Tenison Mosse, Vicar of Somerby, Leicestershire.

GIPPS—POWER.—On July 10th, at St. Mary the Virgin, Datchet, Alexander G. P. Gipps, Staff-Surgeon R N., to Mary, youngest daughter of the late Rev. Henry B. Power, Vicar of Bramley, Surrey.

NORTHCOTE—ANDERSON.—On July 11th, at Christ Church, Lancaster-gate, by the Rev. F. R. Hodgson, M.A., Rector of Little Gaddesden, assisted by the Rev. F. A. O'Brien, M.A., Vicar of Walton, Warwick, Ernest Augustus Northcote, LL.B. Camb., Puisne Judge of the Supreme Court of Judicature, Jamaica, son of the late Stafford Henry Northcote, of Belgrave-road, S.W., to Helena Jane (Lena), eldest daughter of Izett W. Anderson, M.D. Edin., formerly of Kingston, Jamaica.

PANTIN—HUTTON.—On July 10th, at the Parish Church, Pocklington, Charles S. Pantin, M.D., F.R.C.S., to Anna, daughter of the late Rev. Francis P. B. N. Hutton, Vicar of St. Saviour's, Leicester.

PRANGLEY—DOMMETT.—On July 18th, at St. Paul's Church, Upper Norwood, by the Rev. W. H. Graham, assisted by the Rev. C. W. Prangley (cousin of the bridegroom), Henry John Prangley, L.R.C.P. Lond., M.R.C.S. Eng., of Tudor House, Anerley, only son of the late John Peard Prangley, of Heytesbury, Wiltshire, to Clara Elizabeth, youngest daughter of Charles William Dommett, of Moorfield, Anerley. No cards. At home Sept. 9th, 10th, 11th and 12th, 3 to 6 P.M.

DEATHS.

COATES.—On July 10th, in Calcutta, Brigade-Surgeon J. M. Coates, M.D., Indian Medical Service (retired).

GREENE.—On July 11th, Walter Greene, L.R.C.P. Lond., M.R.C.S. Eng., of Wallingford, Berks, aged 57.

GRIFFIN.—On July 13th, at the residence of his mother, East Park-terrace, Southampton, John Griffin, M.B. Edin., of Port Elizabeth, South Africa, eldest son of the late R. W. Waudby Griffin, M.D.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, July 18th, 1895.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Maximum Temp Shade	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
July 12	29·61	N.W.	61	53	115	69	59	0·19	Cloudy
,, 13	29·86	N.W.	61	54	122	80	53	...	Cloudy
,, 14	29·84	N.W.	66	54	121	72	61	...	Cloudy
,, 15	29·95	N.W.	62	55	110	71	54	...	Cloudy
,, 16	29·98	S.W.	60	56	105	70	56	...	Overcast
,, 17	29·84	S.W.	64	60	121	81	56	...	Hazy
,, 18	29·80	S.W.	65	69	111	73	62	...	Cloudy

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynecological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Gt. Northern Central (2.30 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North West London (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.) St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

THURSDAY.—BRITISH LARYNGOLOGICAL AND RHINOLOGICAL ASSOCIATION (Royal Medical and Chirurgical Society's Rooms, 20, Hanover-square, W.).—10 A.M. General Business. Reception of Visitors.—10.30 A.M. President's Address.—11 A.M. Discussion on the Surgical Treatment of the Accessory Cavities of the Nose, introduced by Dr. Luc (Paris), Dr. Bryson Delavan (New York), Dr. John N. Mackenzie (Baltimore), and Dr. F. H. Bosworth (New York).—3 P.M. Discussion on the Treatment of Chronic Laryngeal Stenoses, introduced by Dr. Sajous (Paris).

FRIDAY.—BRITISH LARYNGOLOGICAL AND RHINOLOGICAL ASSOCIATION (Royal Medical and Chirurgical Society's Rooms, 20, Hanover-square, W.—10 A.M. Exhibition of Cases.—11 A.M. Discussion on the Therapeutics of Diphtheria, with special reference to Antitoxin, introduced by Dr. G. Sims Woodhead and Prof. C. S. Sherrington.—3 P.M. Discussion on the Surgical Treatment of Laryngeal Tuberculosis, introduced by Dr. Heryng (Warsaw), Prof. Krause (Berlin), and Dr. Gleitsmann (New York).

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Beevor.

During the week marked copies of the following newspapers have been received:—*Todmorden Advertiser, Derbyshire Courier, Morning, Weekly Sun, Galignani Messenger, Westminster Gazette, Fortnight, Family Doctor, Leeds Times, Yorkshire Gazette, Hampshire Herald, North British Advertiser, Electrical World, Hereford Times, Kensington News, Llandudno Directory, Sheffield Independent, Essex Telegraph, Barnsley Independent, West London Observer, Worcester Herald, South Wales Daily News, Yorkshire Post, Builder, Leicester Post, Vegetarian, Architect, Times of India, Health, Manchester Guardian, Pioneer Mail, Leeds Mercury, Liverpool Daily Post, Irish News, Scotsman, Bristol Mercury, Glasgow Herald, Longford Independent, Brighton Gazette, Freeman, Englishman, Eastern Daily Press, Oldham Chronicle, Madras Weekly Mail, Science Siftings, Courrier de la Presse, Sanitary Record, City Press, St. Mary's Hospital Gazette, Local Government Chronicle, Hertfordshire Mercury, Weekly Free Press and Aberdeen Herald, Reading Mercury, Mining Journal, Bradford Observer, Surrey Advertiser, Kentish Mercury, Local Government Journal, Whitehaven Free Press, Cumberland Pacquet, Wiltshire Times, Birmingham Daily Post, Bridge of Allan Reporter, St. Bartholomew's Hospital Journal, &c., &c.*

Notes, Short Comments & Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

THE INDEX TO THE LANCET.

THE Index for the half-year ending June, which was given in the number of the 29th ult., completed the first volume of the year 1895. The practice of supplying loose copies has been discontinued, the Index having been placed in the centre of the journal, whence it can easily be detached, and placed either at the beginning or at the end of the volume.

VOLUMES AND CASES.

VOLUMES for the first half of the year 1895 are now ready. Bound in cloth, gilt lettered, price 18*s*.

Cases for binding the half year's numbers are also ready. Cloth, gilt lettered, price 2*s*.

To be obtained on application to the Manager, accompanied by remittance.

THE LANCET AND ACCIDENT INSURANCE.

A LITHOGRAPHED CIRCULAR LETTER, emanating from an office in the Strand district, is being sent to members of the medical profession, offering to supply them with THE LANCET, in conjunction with an accident insurance policy. The Proprietors of THE LANCET are in no way connected with the scheme (of which they cannot approve), and were not aware of its inception until their attention was called to it by a reader who had received the circular.

THE RULE AS TO CALLING IN LONDON.

Sigma.—We think that a new comer in London should call on those in practice in the neighbourhood. London is in this respect a place by itself. It is impossible that a medical man can know of the arrival of a new comer as he would in a country town.

"LYSIDINE."

To the Editors of THE LANCET.

SIRS,—In answer to "Subscriber's" inquiry, I beg to inform him that trials made with this drug in Germany have revealed no disturbing symptoms of any kind. As to the cure being temporary or permanent, enough trials of the drug have not yet been made to enable one to say with certainty. I am, Sirs, yours faithfully,

July 16th, 1895. H.

*** The agents for Lysidine are the Jeyes' Sanitary Compounds Co., Ltd., who will give any information in their power concerning the remedy.—ED. L.

MEDICAL DIRECTORS OF COMMERCIAL COMPANIES FOR THE SALE OF ANTISEPTICS.

OUR attention has been directed to the name of a medical man as one of the directors of a company for the sale of a well-known disinfectant and germicide. It occurs on a circular inviting applications for shares. We are practically invited to express an opinion on the fitness of a medical man in such a position. It seems hard that medical men, who often sorely need to have their strictly professional income supplemented by other sources of profit, should be hindered from holding an office of this sort; but on closely considering the question we cannot fail to see the advantage of their perfect freedom. It is not in the interest of the company that they should be on the directorate; for the value of their medical judgment will be so far reduced in the public mind by their supposed commercial interest. And it is not in the interest of the medical man himself that he should be warped in any degree from perfect impartiality of judgment in the preference for antiseptics by such considerations. It is conceivable, of course, that a medical man might be perfectly efficient as a director though interested, and that he might be sincere, too; but, looking at the matter from a professional point of view and in the light of common-sense, our opinion is against the tenure of such offices by members of the profession.

M. H.—Will our correspondent kindly state his question at greater length and detail, explaining more exactly the pecuniary relations existing between himself and another?

"THE TITLE OF 'DR.'"

To the Editors of THE LANCET.

SIRS,—Will you allow me as a layman to contribute a few lines on the interesting question now under discussion in your columns? The difficulty respecting the use of the term "doctor" arises surely from what logicians call the equivocal or ambiguous character of the word. The term "doctor" is used (1) to denote a person professionally engaged in the practice of medicine—in the same manner that the term solicitor is used of those professionally engaged in certain legal work; and (2) as a title, signifying that the holder has been granted the degree of Doctor in one of the Faculties by some University (or by the Archbishop of Canterbury). This title belongs to many lawyers, clergymen, and scientific men, in company with a large number of medical men who are "doctors" in the former sense. As a layman I have made it a rule—sometimes, I fear, at the risk of seeming discourteous—to restrict the use of the title as a form of address to the actual possessors of a Doctor's degree, and consistently with this practice I should refrain, rightly or wrongly, from addressing as Doctor the B.D., the B.C.L., and the M.B. So far for the use of the word as a title. Now it is not customary in England for men to be addressed in ordinary intercourse by the name of the profession which they follow. We frequently say, "Send for my solicitor," "Send for my surgeon," "Send for my dentist," but we should never think of addressing our professional adviser as "Solicitor Jones," "Dentist Smith," or even as "Surgeon Brown," unless "Surgeon" were used as a title of military rank. Why, then, should we make an exception in the case of our medical attendant? In your issue of the 29th ult. your correspondent "Not L.S.A." asks why, if a patient may say, "Send for my doctor," may he not also say, "Good morning, Doctor." My answer is that there is no objection, provided that he uses the word doctor in the same sense in both instances; as a matter of fact, the word is used in two totally different significations—in the former case doctor (small *d*) is simply equivalent to "medical man," while in the latter case Doctor (capital *d*) is used as a title or prefix (analogous to "Colonel" or "Baron"), to which certain University graduates are alone entitled. If the word "doctor" is used in the same sense in both cases, the substitution of a synonym in either case should not affect the meaning. For "doctor" let us, then, substitute "medical man." Now in the former case the meaning is unchanged, "Send for my medical man"; but the substitution in the latter case presents a curious and unusual form of salutation, "Good morning, medical man." Can a better proof be required of the ambiguous use of the word, which I venture to suggest is the *fons et origo* of the difficulty?—I am, Sirs, your obedient servant,

New Oxford and Cambridge Club. R. B. F.

To the Editors of THE LANCET.

SIRS,—From the replies to Dr. Donovan's letter it is evident some Licentiates of the Society of Apothecaries are quite satisfied with the diploma of that body and believe it to be an exceptionally good one. What my own opinion on this matter may be, as it is not always easy to speak or write the truth without being highly offensive, I will not venture to state; yet it is beyond doubt there are a goodly number who hold the diploma of an apothecary who are absolutely ashamed of it and who strictly avoid mention of it on door-plate or certificate. These men usurp the titles conferred by universities and colleges, and unblushingly pose before the public as genuine medical men and physicians. It seems that if a man is on the Register, no matter what his qualification may be, he is in a position to filch what diploma or title he chooses without infringing on the Medical Act, as this simply deals with the unregistered persons who, without a registrable qualification, "makes use of any title, name, &c." It becomes more evident daily that it is long past time the Medical Council took up the subject of medical titles and made it easy for the public to distinguish an apothecary from a physician and a "doctor" from either. I can quite conceive how difficult it is for the Medical Council to enter on a campaign on titles. The Council is composed of the consulting members of our profession mostly, if not altogether. These depend on the general practitioner for consultations. Therefore, for any consultant to initiate a campaign on titles would undoubtedly place him in a position with a large number of his medical supporters that may safely be described as awkward. Self-interest shelves the question, as it does a host of others, and thus the apothecary will continue to pose as a Doctor of Medicine, or a physician, or both, until by some means it becomes a penal offence to practise medicine under false pretences.—I am, Sirs, yours faithfully,

July 16th, 1895. A SPADE.

To the Editors of THE LANCET.

SIRS,—With regard to this much-vexed question I believe it has been pointed out in your columns, not once but many times, that the title of "doctor" when placed upon a brass plate or card implies that such individual is nothing more or less than a Doctor of Medicine, and the same with a practitioner who holds the diploma of a Royal College of Surgeons; that individual alone is entitled to term himself surgeon. Or the practitioner who holds the diploma of the Royal College of Physicians; such individual is entitled to term himself physician. Therefore it is evident that a Licentiate of the Society of Apothecaries cannot be anything else but an apothecary. When the licence of apothecary was converted into a double qualification it was then distinctly pointed out by certain authorities upon the Medical Council that it would be the means of creating two classes of medical and surgical practitioners—viz., the apothecary and the physician and surgeon. I remain, Sirs, yours truly,

July 16th, 1895. L.S.A., LIC. IN MED. AND SURGERY.

To the Editors of THE LANCET.

SIRS,—The perennial question as to whom amongst legally qualified medical men the title of "Dr." belongs has again been opened in your columns. It is not my intention to enter into the discussion, and my only desire in writing is to direct the attention of those interested in the subject to the custom prevailing in Italy, with which I am well acquainted. There all medical men before they are allowed to practise must obtain from one of the numerous universities the degree of, not M.D., but Medico-Chirurgico, which in English is physician and surgeon. Notwithstanding this all these physicians and surgeons call, and are called by everybody, "Dr.," and they would be very much surprised to hear that they have no right to that title. In fact, the usual custom is when signing their names to place the much disputed title before them. Now, I would ask those gentlemen who object to a physician and surgeon in this country using the title, would they also object to his using it in Italy should he set up in practice in a large city there? I am, Sirs, yours truly,

July 6th, 1895. MEDICO-CHIRURGICO.

To the Editors of THE LANCET.

SIRS,—I do not, of course, pretend to understand either Mr. Feeny's English or his code of discussion. His last letter, if it means anything, shows that he is quite in the dark concerning the subject about which he writes. This is surprising; because a man of ordinary perspicacity who has travelled abroad might have been expected to give correct information, instead of simply indulging in personal remarks. I am, Sirs, yours obediently,

Harley-street, W., July 13th, 1895. J. KESER.

To the Editors of THE LANCET.

SIRS,—I have to offer to you and to your readers my apology for having stated that the L.S.A. was by right entitled to style himself "Dr." I made the statement on hearsay evidence, and when I did so believed it so thoroughly that I never even thought of there being any necessity for inquiry. I find that I was completely wrong, and unreservedly withdraw my words, which I much regret having written.

I am, Sirs, yours obediently,

July 16th, 1895. NOT L.S.A.

To the Editors of THE LANCET.

SIRS,—Having written in my own name, I decline to answer your correspondents, who are fearless enough to write as they have done whilst hiding behind the hedge of a pseudonym.

I am, Sirs, yours faithfully,

July 15th, 1895. WILLIAM DONOVAN, M.D. Durh., L.R.C.P. Ed.

THE CLIMATE OF THAYETMYO.

To the Editors of THE LANCET.

SIRS,—Would any reader, army medical officer or otherwise, who knows anything of the climate of Thayetmyo, Lower Burma, kindly inform me whether or not it is a very deleterious one for young children, and if so whether there is a salubrious district near to which invalids could be easily removed in case of ill-health? Answers will be esteemed a great favour, as important interests are at stake.

I am, Sirs, yours truly,

Southport, July 17th, 1895. M D.

PUBLIC LECTURES ON PROFESSIONAL SUBJECTS BY MEDICAL MEN.

THE *Cape Argus* contains an abstract of a lecture on the Eye and Eyesight, delivered to the Young Men's Christian Association by Dr. Fismer, a respected practitioner in Cape Town, who affects some special skill in eye disease, and who is also in general practice. Our opinion, which is asked for, must be general. We consider it a point of good taste that a medical man shall do nothing publicly with a mere purpose to advertise his skill or his professional opinions on moot points of practice. We are not disposed to say that a medical man is not to be permitted to give a lecture to young men that might instruct them. This would be a hard rule, which has been often violated by respected practitioners. But his lecture must savour rather of the teacher than the practitioner—must be physiological rather than medical in its drift.

THE MISUSE OF HOSPITALS.

To the Editors of THE LANCET.

SIRS,—The following two cases—and I could speak of many others—may help to throw some light on the above subject.

1. I had arranged to operate upon the child of A. for post-nasal growths. A. is a gentleman living in a good house of, I suppose, £80 or £90 rental, just home from a month's tour in Devonshire with his family. A few days ago I received a letter containing the following words: "On Saturday an old friend of mine, an influential member of the committee of —— —— Hospital, to whom I had spoken about ——'s throat, told me that he had arranged for Dr. —— of —— street to see —— specially at the hospital at 1.30 P.M. on Monday, and if the operation ought to be done at once they would arrange for her reception then and there." The child went, was operated upon, and taken into the hospital.

2. A gentleman of very good position and means, whom I had attended with alcoholic inflammation of the membranes of the cord, with considerable sloughing, but who recovered with a stiffish hip-joint, married again. His wife took him to see the senior surgeon of —— Hospital, who advised him to come in. He did so, was there treated, and on leaving the hospital is under the care of a gentleman educated under the said surgeon.

Cases might be multiplied; but surely it is going a little beyond the very low moral tone prevalent when "an influential member of the committee" becomes little less than a tout for other people's patients.

I am, Sirs, faithfully yours,

July 15th, 1895. A THIRTY YEARS' PRACTITIONER.

LORD BYRON'S LAMENESS.

To the Editors of THE LANCET.

SIRS,—Being much interested in the subject of club-foot, whether congenital or acquired, I should be obliged if you could tell me where I can find out the nature of the deformity from which Lord Byron suffered. In Moore's Life of Byron he says: "By an accident which occurred, it is said, at the time of his birth one of his feet (the right) was twisted out of its natural position, and this defect, chiefly on account of the mechanical contrivances employed to remedy it, was a source of great inconvenience to him. ..... The expedients used were adopted by the advice and under the direction of the celebrated John Hunter, with whom Dr. Livingstone of Aberdeen corresponded on the subject." Can any of this correspondence be unearthed? Or can any of your correspondents who have more advantages of national medical libraries than we have at this end of the world find out for me what the precise nature of the disease was?—I am, Sirs, yours faithfully,

Dunedin, New Zealand, May 22nd, 1895. M.B., C.M.

SANITARY SHIELDS FOR BABIES' FEEDING BOTTLES, &c.

THESE are discs of highly-glazed porcelain, designed to replace the familiar bone shields which are attached to the teats of infants' feeding bottles. The bone shields, even when of good quality, soon become roughened and porous, and are liable to absorb saliva and milk, drawbacks from which the sanitary shields are entirely free. In the artificial feeding of infants thorough cleanliness is indispensable, on which ground the utility of this device is at once apparent. The makers are Messrs. Kennedy and Co., 159, Kingsland-road, London, E.

THE METHODS OF CERTAIN PROVIDENT ASSOCIATIONS.

To the Editors of THE LANCET.

SIRS,—Whilst in a shop talking to a patient an agent entered, presenting a list of medical names offering professional attendance for three half-pence per week. Without disclosing my identity, I ventured to object to such advantages being offered to any except the working-classes, on which the agent declared that all were fish to his net, even to a man with a rental of £150 per annum. He went on to explain that medical men, like lawyers, were only a "figment," and they were only too glad to accept such emolument. He then paraded the name of a new-comer who had "signed the contract." The agent was evidently prepared to tout to any extent, stating that he would accept the Prince of Wales if willing to join on the same terms.

I am, Sirs, yours faithfully,

July 17th, 1895. MEDICUS.

"ALLEGED TOUTING BY A PUBLIC VACCINATOR."

IN noticing under this title a dispute between a practitioner and the public vaccinator of his neighbourhood we found it our duty upon the facts supplied to us to comment severely upon the public official. We have since, however, received a letter from the public vaccinator's principal, which places a different complexion upon the matter, and we are much obliged to him for it, and we regret that its essential point was not previously perceived. In our former comments we were under the impression that the public vaccinator had acted on his own accord, for it was not previously brought to our notice that his visit had been made only in consequence of representations made to him by the vaccination officer with regard to defaulters. This point was not brought out in any of the previous letters submitted to us. Had it been we should certainly not have used the term "touting" with regard to the public vaccinator's action.

N.H.S.—We consider that our correspondent will be quite right to describe himself in the Medical Directory as a late officer to the institution under its present name.

"THE SKOPTZY."

To the Editors of THE LANCET.

SIRS,—In the Museum of the Royal College of Surgeons (Pathological Series, No. 26) your correspondent will find a dissection of part of the pelvic viscera of an adult member of this sect. The operation was performed in early adult life. The external organs were, as is the custom, entirely removed. In the specimen atrophy of the prostate is well marked, the vasa deferentia are threadlike, and the vesiculæ seminales are without their natural pouchings. The women submit to mutilation of the mammæ. Jules Claretie introduces two members of this sect in one of his works of fiction. Pelikan wrote an important and well-illustrated monograph on the subject—"Gerichtlichmedicinische Untersuchungen über das Skopzenthum in Russland."

I am, Sirs, yours faithfully,

July 15th, 1895. ALBAN DORAN.

THE "SANITAS" POCKET DISINFECTANT.

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THE TREATMENT OF TRISMUS.

To the Editors of THE LANCET.

SIRS,—Would any of your readers kindly give me any hints as to treatment in the following case?

A man aged thirty-three, saddler, suffers from chronic trismus. Three years previously had sunstroke in West Australia. Since then has had constant grinding of the teeth at night—so much so as to disturb others, although not cognisant of it himself. Nerve sedatives and tonics have been tried, but with no avail. Temporary relief with bromides; symptoms returning with discontinuance of treatment. Blisters and galvanism have also been used, but no relief obtained. General health is always good. I am, Sirs, yours faithfully,

July 13th, 1895. M.R.C.P.I.

POOR-LAW MEDICAL OFFICERS.

To the Editors of THE LANCET.

SIRS,—I should feel obliged if you will kindly answer the following:—

1. Would the Local Government Board sanction my appointment as Poor-law medical officer for a few weeks pending permanent appointment being made, having only the surgeon's qualification? 2. When an appointment is made would the Local Government Board sanction my appointment as deputy? I am, Sirs, yours truly,

Wolverhampton, July 15th, 1894. QUÆSITUS.

*** 1. Yes, if appointed by the guardians.—2. The deputy appointment would rest with the guardians.—ED. L.

WANTED, ADVICE ON HEALTH RESORTS.

To the Editors of THE LANCET.

SIRS,—Would any of your readers be kind enough to give me some information as to a good continental health resort where cases of rheumatic neuralgia are benefited? Also as to a good and suitable winter place (not Egypt) for a case of chronic nephritis?

I am, Sirs, yours truly,

July 15th, 1895. O. H.

Communications, Letters &c. have been received from—

A.—Dr. McCall Anderson, Glasgow; Mr. H. W. Allingham, Lond.; Ancoats Hospital, Manchester, Secretary of; Alpha, Lond.

B.—Dr. D. C. Black, Glasgow; Dr. W. Bennett, Manchester; Dr. H. Boyden, Devonport; Mr. Blackett, Lond.; Mr. W. M. Beaumont, Bath; Mr. G. R. Butler, Lond.; Mrs. Bennett, Lond.; Messrs. Burgoyne, Burbidges, and Co., Lond.; Messrs. Burroughs, Wellcome, and Co., Lond.; Messrs. Blondeau et Cie., Lond.

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Q.—Quæsitus.

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Letters, each with enclosure, are also acknowledged from—

A.—Dr. W. Adye, Bradford-on-Avon; Mr. W. F. Abbott, Boscombe; Apothecaries' Hall, Ireland, Conductor of; Ashwood House, Kingswinford, Secretary of; Aleph, Lond.; A. J., Lond.; Alpha, Adam-st.; Alpha, Lond.

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